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The Influence of Intrinsic and Extrinsic Job Satisfaction Factors and Affective Commitment on the Intention to Quit for Occupations Characterized by High Voluntary Attrition

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THE INFLUENCE OF INTRINSIC AND EXTRINSIC JOB SATISFACTION
FACTORS AND AFFECTIVE COMMITMENT ON THE INTENTION TO QUIT FOR
OCCUPATIONS CHARACTERIZED BY HIGH VOLUNTARY ATTRITION

By

Kenneth Mark Baylor

A DISSERTATION

Submitted to

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H. Wayne Huizenga School of Business and Entrepreneurship

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for the degree of

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A Dissertation
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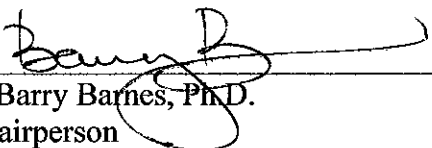
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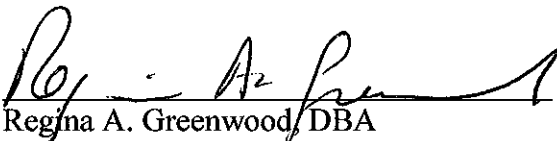
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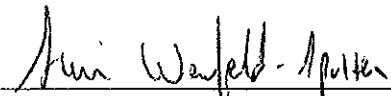
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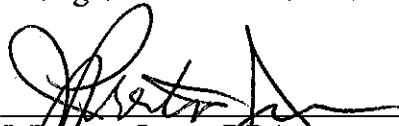
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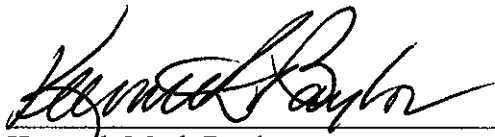
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ABSTRACT

THE INFLUENCE OF INTRINSIC AND EXTRINSIC JOB SATISFACTION FACTORS AND AFFECTIVE COMMITMENT ON THE INTENTION TO QUIT FOR OCCUPATIONS CHARACTERIZED BY HIGH VOLUNTARY ATTRITION

By

Kenneth Mark Baylor

The purpose of this research was to determine the antecedents to the intention to quit in an occupation characterized by a high degree of voluntary attrition. This study posits that job satisfaction and affective commitment are antecedents to voluntary turnover. The study concerns the application of Herzberg's Two-Factor Theory to determine the influence of intrinsic and extrinsic job satisfaction factors and affective commitment on the intention to quit among drivers in the solid waste management industry. Participants were volunteers taken from an industry leading publicly listed company, a premier privately held organization, and a unionized operation which represent all three principle lines of business. The research sample has 380 drivers randomly selected from the commercial, industrial, and residential driver classifications. Each of the participants responded to questionnaires which included items about demographics, job satisfaction, affective commitment, and the intent to quit. The data was analyzed using the Statistical Package for the Social Sciences (SPSS) Graduate Pack 16.0 with Amos. Pearson's Product-Moment Correlation was used to determine the correlation between the job satisfaction factors, affective commitment, and the intention to quit. Independent-samples t-tests were used to test the difference between groups such as union versus non-union, public versus privately held companies, and between lines of business. The outcome of the study supports Herzberg's theory and reveals that affective commitment has greater influence on the intent quit than job satisfaction. This study is the most comprehensive of its kind to address a qualitative organizational behavior issue in the solid waste management industry. In addition, the results reveal opportunities for employers to align human capital strategies with key job satisfaction factors to gain affective commitment and improve operational performance. Comparisons within the three lines of business and between union and non-union operations were included in the analysis with the results revealing no significant differences between operations or positions.

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To me, my Dad was bigger than life, and I always wanted to do things that would make him proud of me. His big hugs and solid handshakes were so rewarding. He never gave me bad advice. I learned the most from him.

Thankfully, many others have also inspired me. In fourth grade, Mrs. Garmathy assured me that I was a good reader. Coach Thoale, a Marine, wrote atop my otherwise mediocre eighth grade report card, "Ken is a leader!" In high school, Coach Appleby got my attention when he admonished me for giving less than my best and ended by saying, "You kick a thoroughbred in the ass and it runs; you kick a donkey and it kicks back; let's see what you are." Later, an exciting undergraduate business professor, Louis P. White, showed me the light to professional success.

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To my sons, Ken and Brett, your ceiling and visibility are unlimited. God, love, and truth are with you always. Take action. Dream further.

My goal is accomplished!!!

Without a doubt, my Dad is proud of me....

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CHAPTER I

The purpose of this research was to determine the antecedents to the intention to quit in an occupation characterized by a high degree of voluntary attrition. This chapter provides insight on the extent of the problem and the adverse affects of such turnover by a category of employee that is critical to environmental compliance nationwide. The significance of the problem is discussed along with the research questions and hypotheses. In addition, the chapter provides definitions of key terms, discusses variables, limitations, and assumptions that underlie the study.

Background

This study concerns the application of Herzberg's (Herzberg, Mausner & Snyderman, 1959; Herzberg, 1966) Two-Factor Theory to determine the effect of intrinsic and extrinsic job satisfaction factors and affective commitment on the intention to quit among drivers in the solid waste management industry. As discussed in detail below, the industry suffers from extraordinary turnover rates and operational effectiveness is adversely affected as a result. Participants were taken from an industry leading publicly listed company, a premier privately held organization, and a unionized operation which represent all three principle lines of business. This study is the most comprehensive of its kind to address a qualitative organizational behavior issue in the solid waste management industry.

The solid waste management industry represents a common thread of vital services that is woven into every community in America. The Environmental Research and Education Foundation commissioned a comprehensive study in 2001 that found that the industry accounted for annual revenues of \$43.3 billion and employed about 367,800

people (Beck, 2001). Since that report, annual revenues have increased to \$55.7 billion (Waste Business Journal, 2009). Indeed, the industry's payroll alone is approximately \$10 billion. From an economic impact standpoint, the study found that the waste management industry contributed over \$96 billion to the United State's economy, 948,000 jobs, and slightly more than one percent of the nation's Gross Domestic Product (p. 3). Clearly, it is an industry that deserves attention.

To be sure, it is not a pretty industry. The work is distributed among publicly traded and private companies as well as local municipalities. Drivers constitute the lion's share of the workforce from an estimated 27,000 organizations (Beck, 2001). They are also the most visible industry representatives and are often looked down upon by the general public or incorrectly stereotyped as those who got the jobs promised by third grade teachers to students who did not study hard enough. Perhaps this accounts for the researcher's finding just three prior studies that address the qualitative interests of this industry's employees and none in the last 10 years.

On balance, there is no shortage of research on employee turnover and workforce retention strategies, generally (Grensing-Pophal, 2000). It is just that none of it touches upon the huge solid waste management industry which is overly burdened by the problem. Nor does the study of the influence of job satisfaction factors and affective commitment pierce the veil of solid waste management drivers. This study helps to fill this gap in organizational behavior research.

With respect to employee intentions to quit, nearly every organization has long shared an interest in heading off turnover and improving upon their respective employee

retention statistics (Griffeth & Hom, 2001). Nevertheless, the challenge has not been met in the solid waste management industry.

Turnover rates have been on the rise for years (Griffeth & Hom, 2001). The effect can be especially harmful to productivity and safety outcomes (Shaw, Dineen, Fang & Vellella, 2009). The solid waste management industry's second largest employer claims that its turnover rate runs between 28% and 40% annually and the industry average is in the high 30s (Marquez, 2007). Further, a recent general study claims that over 60% of employees will be actively engaged in a job search within the next three months (Manufacturing News, 2007). Most of that activity will occur during working hours. Of greatest concern may be the fact that two thirds of those seeking alternative employment are tenured and their departure would significantly drain the organization's talent and knowledge base.

Another study estimated that the number of job seekers would be more like 75% (Cohen, 2005). Further, those who look for a change in employment appear to be having success since national turnover rates currently average 19.3% overall (Institute of Management and Administration, 2005). The estimated turnover rate jumps to about 23.2% among truck drivers with some organizations reporting rates as high as 105.5% (Morrow, Suzuki, Crum, Ruben, & Pautch, 2005). Morrow et al. (2005) also call attention to the general shortage of qualified drivers in the first place and inherent recruitment competition.

There are some who contend that high turnover rates are simply the by-product of a strong economy and low unemployment rates (Gurchiek, 2005). Others, like human resource professionals, assert that pay and benefits are the leading cause of turnover

(Manufacturing News, 2007). However, in the same study it was concluded that employers are, for the most part, unaware of the underlying reasons for employee dissatisfaction beyond compensation (p. 2). Thus, further research on the influence of job satisfaction factors and affective commitment on intentions to quit is warranted to shift away from misguided beliefs and identify opportunities for organizational performance improvements.

The implications of employee turnover on organizational performance are far reaching. The hard and soft costs alone can easily range from 50% of one's base salary to as much as 200% of the leaver's wages (Cascio, 2000; Manufacturing News, 2007). In the solid waste management industry, for example, every time a driver leaves, so does the company's substantial investment in his safety training (Beck, 2001). Maintenance costs increase when expensive collection equipment is strained by developing operators. Customer service is compromised by missed stops during orientation periods. Fuel costs rise with expanded route times. Further, morale declines when a daily shortage of experienced employees leads to fatigue and weakened communications among those remaining (Morrow et al., 2005). Obviously, if this goes on long enough, the problem will be exacerbated by more turnover and competitive advantages will soon slip away (Baylor, 2007). Profitability will also suffer.

This is not to say that all employee turnovers are bad. In fact, some may be desirable. The functional loss of marginal performers or overpaid talent could actually benefit an organization (Griffeth & Hom, 2001). Furthermore, reducing turnover to zero is unrealistic (Hansen, 2005). The focus of this research was aimed at minimizing

dysfunctional or unwanted turnover since it has the greatest negative impact on organizations (Griffeth & Hom, 2001).

This study posits that job satisfaction and affective commitment are antecedents to voluntary turnover. Unfortunately, corroborating reports on declining morale and job satisfaction in America illustrate the underlying rationale for managements' ongoing concern about employee retention (Watson Wyatt Worldwide, 2009; Dickler, 2009; The Conference Board, 2009). Further, the link between employee attitudes and business performance has been established (Saari & Judge, 2004). For example, companies with engaged employees enjoy 26% higher productivity and a 13% advantage in shareholder returns (Watson Wyatt Worldwide, 2009). However, employee engagement numbers have dropped 9% since 2008, and nearly 25% among top performers (Miller, 2009).

In 2004 and 2007, Watson Wyatt Worldwide reported that two out of every three companies surveyed expressed difficulty in attracting employees who possess the critical skills necessary to achieve business objectives. The issue is exacerbated by America's distinction as having the highest mean turnover rate (i.e., 11%) in the world (Watson Wyatt Worldwide, 2007). Surveyed employers estimated that 37% of their employees were interested in alternative employment while 65% of their people admitted to looking elsewhere (Salary.com, 2009). The Conference Board (2009) found that 83% of respondents would be actively considering changing jobs when the economy improves. Yet, in 2001, three-quarters of the respondents in a study by The Randstad Review indicated that their interests were in long-term employment with a single entity. Something is driving them away.

The Conference Board reported in 2007 that its research found that job satisfaction reaches less than half of Americans workers. In 2010, The Conference Board reported that job satisfaction had fallen to a record low. Fewer than 30% are satisfied with their company's performance review process, recognition programs, and opportunities for future growth. Just 30% of employees are happy with their pay (Society for Human Resource Management, 2009). And the beat goes on.

In a study of job attitudes, Watson Wyatt Worldwide (2009) found that some 43% of American workers are uncommitted to their organizations. Only 32% said their companies' fostered teamwork, and just 53% felt that they were aligned with business goals and objectives (Watson Wyatt Worldwide, 2009). Leadership and supervision continue their declining trend by receiving the lowest scores with 48% and 47% favorable ratings, respectively (Watson Wyatt Worldwide, 2009; Watson Wyatt Worldwide, 2007). Clearly, there is a lot of room for immediate improvement.

In sum, this research closes in on whether intrinsic and extrinsic job satisfaction factors and affective commitment are related to the intention to quit among solid waste management drivers. The scope of this study included randomly selected drivers from separate unionized, privately held, and publicly traded operations of premier solid waste collection and disposal companies. The participants came from each of the industry's three principle lines of business, namely commercial, residential, and industrial, which are most common and constitute the greatest source of revenue.

Significance

This is a study of first impression in the solid waste management industry. There is nothing of its kind that measures the influence of intrinsic and extrinsic job satisfaction

factors and affective commitment on intentions to quit among solid waste management drivers. It answers whether certain factors are influential and to what degree. The findings also contribute to an enlightened field of precision in targeting the most effective retention strategies for drivers that can lead to improved operational safety, organizational efficiencies, increased profitability, and competitive advantages in the solid waste management industry.

Purpose of the Research

The purpose of this research was to determine the antecedents to the intention to quit in an occupation characterized by a high degree of voluntary attrition. The results reveal opportunities for employers to align human capital strategies with key job satisfaction factors to gain affective commitment and improve operational performance. Comparisons within the three lines of business and between union and non-union operations are included in the results.

Research Questions

The research questions for this study are listed below.

1. Are intrinsic and extrinsic job satisfaction factors negatively related to the intent to quit?
2. Is affective commitment negatively related to the intent to quit?
3. Do intrinsic and extrinsic job satisfaction factors mediate in favor of affective commitment?

Hypotheses

It is hypothesized that drivers with higher measures of extrinsic and intrinsic job satisfaction factors and affective commitment are less likely to intend to leave an organization.

H1a: Extrinsic job satisfaction for drivers is negatively related to their intention to leave the organization.

H1o: Extrinsic job satisfaction for drivers is not related to their intention to leave the organization.

H2a: Intrinsic job satisfaction for drivers is negatively related to their intention to leave the organization.

H2o: Intrinsic job satisfaction for drivers is not related to their intention to leave the organization.

H3a: Affective commitment for drivers is negatively related to their intention to leave the organization.

H3o: Affective commitment for drivers is not related to their intention to leave the organization.

The Sub-Problems

The First Sub-Problem. The first sub-problem was determining whether intrinsic job satisfaction factors influence the intention to quit.

The Second Sub-Problem. The second sub-problem was determining whether extrinsic job satisfaction factors influence the intention to quit.

The Third Sub-Problem. The third sub-problem was determining whether affective commitment specifically influences the intention to quit.

The Fourth Sub-Problem. The fourth sub-problem was determining whether intrinsic and extrinsic job satisfaction factors have a causal effect on affective commitment and the intention to quit.

The Delimitations

1. The study was limited to drivers who work in the commercial, industrial, and residential lines of business in the solid waste management industry.
2. The study did not include any drivers outside the solid waste management industry.
3. The study did not include the industry's liquid waste, hazardous waste, transfer, recycling, or container delivery drivers.
4. The study did not include solid waste management drivers employed by municipalities.

The Limitations

1. The research sample was limited to employees from three separate operations.
2. The analysis of demographic data did not determine whether there is an effect of demographic criteria on the intent to quit.
3. The results could differ in various geographical locations.
4. The impact of the economy on the intent to quit was not addressed.
5. Other factors which may influence the intention to quit were not measured.

Assumptions

1. It was assumed that all of the respondents were literate, credible, and reasonably accurate.

2. It was assumed that selected survey instruments were valid indicators of job satisfaction, affective commitment, and intentions to quit.

Variables

The dependent variable is the intention to quit. The independent variables are intrinsic and extrinsic job satisfaction factors and affective commitment. The research analysis sought to determine whether the job satisfaction factors mediate in favor of affective commitment (Trimble, 2006; Yousef, 2002).

Definitions

Intrinsic Job Satisfaction Factors. Herzberg (Herzberg et al., 1959; Herzberg, 1966) termed these as motivating factors that centered on achievement, recognition, responsibility, advancement, growth, and the work itself. Although their absence was not necessarily dissatisfying, when present, they could be a motivational force (Herzberg et al., 1959; Herzberg, 1966).

Extrinsic Job Satisfaction Factors. The hygiene factors are supervision, working conditions, co-workers, pay, policies and procedures, job security, status, and personal life (Herzberg et al., 1959; Herzberg, 1966). They are not necessarily satisfying, but their absence could cause dissatisfaction.

Affective Commitment. The measure of loyalty to the organization (Meyer & Allen, 1997).

Intention to Quit. According to Elangovan, the intention to quit is “an attitudinal orientation or a cognitive manifestation of the behavioral intention to quit” (Elangovan, 2001).

Commercial Line of Business. The collection and disposal of non-hazardous solid waste from retail establishments, restaurants, and professional office buildings (Beck, 2001).

Industrial Line of Business. The collection and disposal of non-hazardous solid waste from factories and construction sites (Beck, 2001).

Residential Line of Business. The curbside collection and disposal of non-hazardous solid waste and yard waste from single and multi-family homes (Beck, 2001).

In sum, this chapter has explained the nature of the study and its significance. It has shown that attrition is a problem for businesses generally, and the solid waste industry, specifically. Moreover, the evidence supports that the hypothesized antecedents to turnover, namely job satisfaction and affective commitment, also require management's attention to realize the full potential of their performance objectives. The research questions and hypotheses sought the antecedents to the intention to quit. Further, limitations of the study are specified along with sub-problems and assumptions. The findings reveal valuable insights that provide guidance for enhanced operational performance. The next two chapters review relevant literature and the methodology for this research, respectively.

CHAPTER II

Literature Review

The literature supporting the research for the aforementioned study is discussed below. The review begins with a historical account of the development of motivational theory, including Herzberg's (Herzberg et al., 1959; Herzberg, 1966) Two-Factor Theory and its application in related studies. Extrinsic and intrinsic job satisfaction and motivation factors are also defined. The appropriateness of that theory is shown by the cited research which illustrates the support and challenges to the theory when tested in various settings. Clearly, more research is warranted to further refine the theoretical applications of Herzberg's work, particularly insofar as it applies to an understudied industry.

In addition, the review examines the process and content theories with an emphasis on their relationship to job satisfaction. Further, social identity theory is discussed as it pertains to affective commitment.

Much of the relevant research on extrinsic and intrinsic job satisfaction and motivation factors pivot off Frederick Herzberg's (Herzberg et al., 1959; Herzberg, 1966) Two-Factor Theory and such is true in this case, too. Thus, its application is the focus of the review. The literature review then extends to other works that discuss the influence of extrinsic and intrinsic job satisfaction and motivation factors and their relationship to affective commitment. Against that background, literature regarding the intentions to quit is also reviewed.

Finally, the limited application of the theory to issues related to the solid waste industry will be recognized. In this regard, extant research will be discussed and distinguished.

The Research Model

This model for this research is shown below. It is based on Herzberg's (Herzberg et al., 1959; Herzberg, 1966) Two-Factor Theory and will explore the relationship between intrinsic and extrinsic job satisfaction factors and affective commitment on the intention to quit. The research will also seek to determine whether there is a causal effect of job satisfaction factors on affective commitment and to what extent that has an influence on the intent to quit.

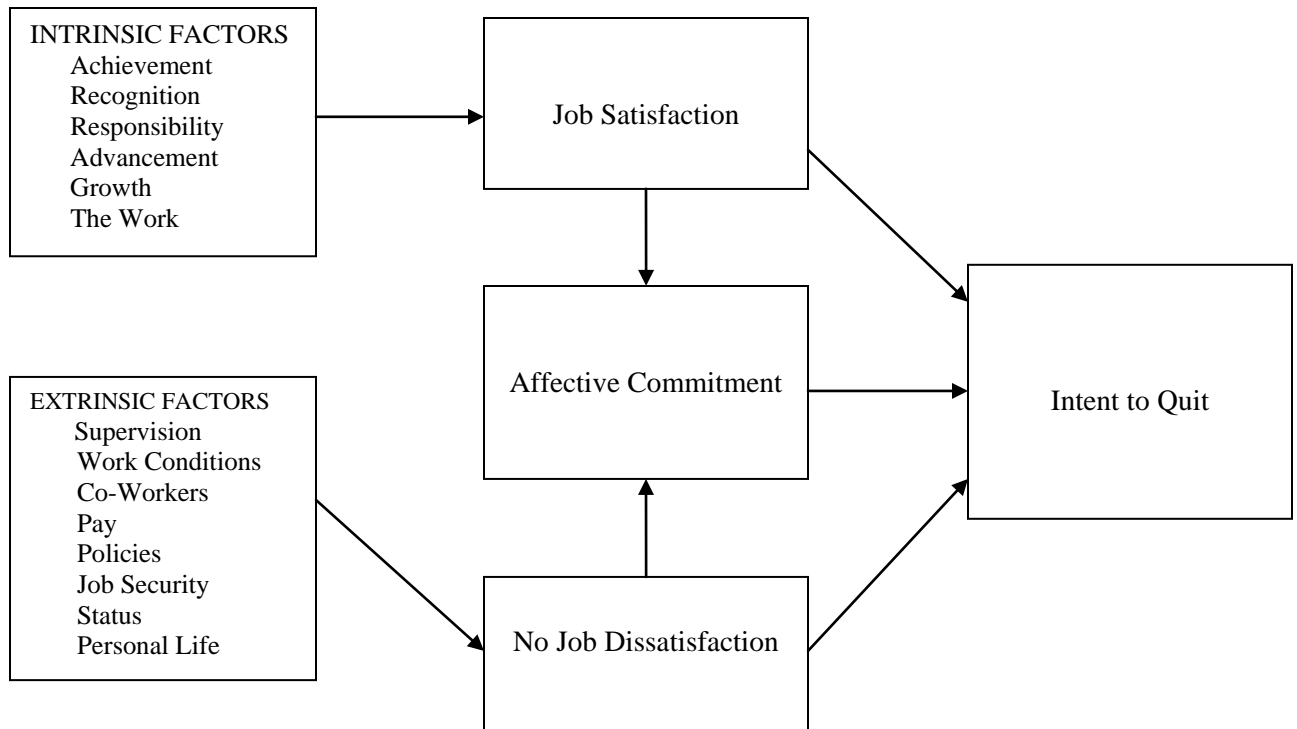


Figure 1. The Research Model developed for this study is based on Herzberg's Two-Factor Theory.

Past is Prologue

In the Preface of his seminal study, *The Motivation to Work* (Herzberg et al., 1959), Herzberg gave a succinct explanation for the importance of studying attitudes and job satisfaction. His comments follow and best illustrate the durability of the topic:

Why study job attitudes? During the period when the study reported in this volume was conducted the answer seemed obvious. There was full employment, with nearly 100 percent utilization of plant and facilities. It was questionable whether the utilization of manpower was complete. Thus industry seemed to face a situation in which one of the crucial ways to expand productivity was to increase the efficiency of the individual at the job. On the other side of the same coin, there was the continuing dread of the mechanization of people as well of jobs. There was a feeling that in a world in which there was a surfeit of material things man was losing zest for work, that man and his work had become distant and alienated. Thus, both from the point of view of industry and the point of view of the individual, it seemed overwhelmingly necessary to tackle the problem of job attitudes. Let us be precise. To industry, the payoff for a study of attitudes would be increased productivity, decreased turnover, decreased absenteeism, and smoother working relations. To the community, it might mean a decreased bill for psychological casualties and an increase in the over-all productive capacity of our industrial plant and the proper utilization of human resources. To the individual, an understanding of the forces that lead to improved morale would bring greater happiness and greater self-realization. At the time of the present writing the world has changed somewhat. Our economy is so variable that it would be foolish to predict its state when this volume reaches the

public, but right now we are faced by significant unemployment, by an underutilization of our industrial plant, and by a shift of interest from the problems of boredom and a surfeit of material things to a concern for the serious social problems of unemployment and industrial crisis. Yet the problem of people's relationships with their work continues to be a basic one. We should not overlook the fact that although the ebb and flow of our economy would produce occasional periods of both over and under employment the problem of an individual's attitudes towards his job remains constant.

In fact, it may be that during hard times the edge that will determine whether a concern will survive will be given by the level of morale within the personnel.

(p. xxi-xxii)

Efforts to understand the intricacies of employee motivation and job satisfaction can be traced to the beginning of the twentieth century (Locke & Latham, 1990). Frederick Taylor (1911/1967) introduced the science of incentive systems as a means of motivation. Frank and Lillian Gilbreth (1914/1973) added time and motion techniques to improve the design of work tasks. Indeed, Locke and Latham's (1976) Goal-Setting Theory of motivation is based in substantial part on the work of Taylor and Gilbreth.

The factors causing fatigue and monotony on workers were studied in Britain (Ryan, 1947). The celebrated Hawthorne studies provided insight into the relationship of peers and supervisors to job performance and employee morale (Roethlisberger & Dickson, 1939/1956). In 1935, Robert Hoppock sought to measure quantitatively job satisfaction. Rensis Likert (1961) centered his study on employee participation in

decision making. Later, Edward Lawler (1971) examined the effects of compensation on motivation.

The genesis of the formal study of behaviorism is marked by John Broadus Watson's (1913) work on learning concepts and emphasis on stimulus-response mechanisms. Interestingly, this was an extension of earlier conditioning work by Russian Nobel Prize Laureate, Ivan Pavlov (Pate, 1978). Watson claimed that either external or internal stimuli determined behavior through mechanistic or reinforcement behavior.

In 1935, cognitive theorist, Kurt Lewin, introduced the intrinsic-extrinsic distinction which was later popularized by Herzberg (Broedling, 1976). Lewin viewed behavior as a function of the environment and the person. Of course, his work also evolved into the study of resistance to change that resulted in the famous three-step model regarding change (Lewin, 1951).

Subsequently, an emphasis on needs and motives was advanced by Maslow (1943), McClelland (1962), Herzberg (Herzberg et al., 1959; Herzberg, 1966), and Alderfer (1972). Maslow's (1943) categorical hierarchy of needs lists in defined order physiological, safety, love, esteem, and self-actualization as motivators. McClelland's (1962) Learned Needs Theory of motivation included the need for achievement, affiliation, and power. As discussed in greater detail below, Herzberg's (Herzberg et al., 1959; Herzberg, 1966) study revealed factors that contributed to employees' satisfaction or dissatisfaction on the job. One of the intrinsic factors, the work itself, is linked to McClelland's (1962) need for achievement since people interested in one tend to be interested in the other (Roberts, 1970). Herzberg's theory was also found to be closely related to Maslow's needs hierarchy (Weisbord, 1975). Alderfer's (1972) Existence-

Relatedness-Growth Theory modified Maslow's (1954) hierarchy by claiming that needs may vary by person and can motivate in unison (Mitchell, 1982).

During the same period, Vroom (1964) asserted that motivation was linked to an individual's expectations about his or her ability to perform at expected levels and obtain rewards. Porter and Lawler (1968) took Vroom's work further and proposed a model for intrinsic and extrinsic motivation which encompasses interesting work and rewards, respectively. They proposed this be accomplished by enlarging the jobs to make them more interesting, and by performing at that higher level, pay and advancement opportunities would follow. Thus, job satisfaction would increase. This proved to be a controversial concept as under this model, extrinsic rewards were found to undermine intrinsic motivation (Gagne & Deci, 2005).

Notwithstanding strong practitioner support, Herzberg's Two-Factor Theory of motivation was initially in the middle of a decade long academic debate which challenged its methodology and alleged inconsistent use of terms (Sachau, 2007). During that period, the theory proved to be quite durable and has since proven to be "...surprisingly consistent with the basic tenets of motivation-hygiene theory" in the area of positive psychology (Behling, Labovitz, & Kosmo, 1968; Caston & Braitto, 1985; Sachau, 2007, p. 378).

Content and Process Theories

Motivation theories fall in one of two categories: content or process theories (Coomber & Barriball, 2007; Gibson, Ivancevich, Donnelly, & Konopaske, 2003). Content theories center on individual needs within the person that motivate certain behavior (Ruthankoon & Ogunlana, 2003). In this regard, Locke (1976) stated that such

theories “specify the particular needs that must be attained for an individual to be satisfied with his job” (p.1307). Examples are Maslow’s Hierarchy of Needs Theory, Herzberg’s Two-Factor Theory, Alderfer’s ERG Theory, and McClelland’s Learned Needs Theory.

By contrast, process theories evaluate why and how internal and external factors and situations motivate certain behavior (Ruthankoon & Ogunlana, 2003; Gibson, et al., 2003). Locke (1976) said they “specify needs or values most conducive to job satisfaction” (p. 1302). Examples are Locke’s Goal-Setting Theory, Vroom’s Expectancy Theory, and Porter and Lawler’s Extension model.

Social Identity Theory

This theory is aligned with affective commitment and pertains to an individual’s self-categorization into various workplace social groups based on gender, age, economic status, skills, and interests (Tajfel & Turner, 1986; Brunetto & Farr-Wharton, 2002). Along with this affiliation comes a measure of positive or negative self-esteem associated with organizational membership. The positive aspect enhances job satisfaction and affective commitment and reduces the likelihood of voluntary attrition (Tajfel & Turner, 1986; Brunetto & Farr-Wharton, 2002).

Key Theory

Herzberg’s (Herzberg et al., 1959, Herzberg, 1966) Two-Factor Theory of motivation was one of the early arrivals among several needs theorists (Ramlall, 2004). Based on his study of 200 Pittsburgh based accountants and engineers, Herzberg concluded that people had two sets of needs: hygiene or extrinsic factors, and motivators or intrinsic factors.

This meant that satisfaction and dissatisfaction were separate constructs influenced by different stimuli rather than varying amounts of the same factors (Maddox, 1981). The following models (Brockman, 1971) illustrate the difference between the conventional thinking and Herzberg's duality.

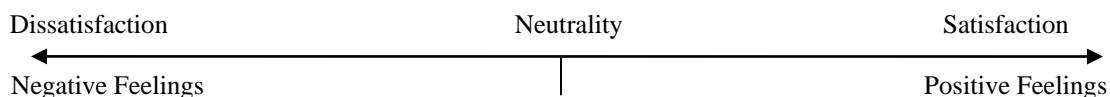


Figure 2. Conventional Continuum

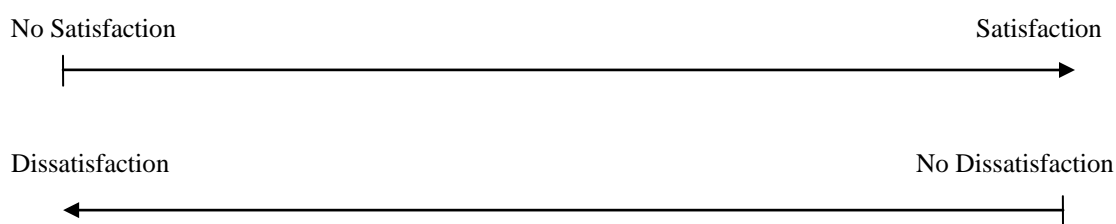


Figure 3. Dual-Factor Continua

Herzberg's view of motivation also showed Maslow's (1943) influence by observing that "motivation is a function of growth" particularly where learning brings personal advancement (Byrne, 2001, p. 326). This self-development is critical to the achievement of an organization's long-term business objectives.

In a subsequent article, Herzberg (1968) explained seven principles which would contribute to a motivating work environment for employees. This vertical enrichment included limiting controls, increased accountability, whole work assignments, job empowerment, direct communications, increasingly challenging work, and special tasks to establish expertise. He distinguished it from the ill-advised horizontal job loading techniques such as job rotation, ever increasing production expectations, and adding meaningless tasks. This showed that the role of supervisors extends beyond the establishment of wages, hours, and other terms and conditions of employment.

Extrinsic Factors

The extrinsic factors are supervision, working conditions, co-workers, pay, policies and procedures, status, personal life, and job security (Herzberg et al., 1959; Herzberg, 1966). Herzberg claimed that these factors did not serve as satisfiers, but their absence could well be a source of dissatisfaction. Thus, a neutral state would obtain.

Supervision. Herzberg (Herzberg et al., 1959; Herzberg, 1966) associated this factor with an employee's general attitude about his/her relationship with an immediate supervisor. Negative perceptions in this category have been shown to have a substantial influence on lower job satisfaction, commitment, and the intent to quit (Mardanov & Heischmidt, 2009; Mardanov, Sterrett, & Baker, 2007). A positive supervisor-employee relationship influences the quality of two-way communication, trust, and performance while increasing job satisfaction, organizational commitment, and lower intentions to quit (Harris, Harris & Eplion, 2007).

Work Conditions. This item concerns the physical work atmosphere including space, lighting, ventilation, and equipment (Herzberg et al., 1959; Herzberg, 1966). In a study of industrial and office workers conducted by Lee in 2006, job satisfaction was found to be positively related to individual flexibility, personal control of the immediate work environment, social interaction, privacy, and few distractions or disruptions.

Co-Workers. The quality of interpersonal relationships between co-workers at all levels influences the good feelings and positive support associated with job satisfaction (Harris, Winkowski, & Engdahl, 2007). This includes coaching, helping with assignments, and giving instruction. A positive relationship has been found to contribute to motivation and mediate against stress (Shirey, 2004). In addition, it reduces the intent

to quit (Morano, 1993). On the other hand, the lack of social support increases the likelihood of turnover and contributes to job related depression and burnout (Shirey, 2004).

Pay. Research has shown that compensation does not have a long-term motivational effect (Furnham, 2006). Nor does it necessarily increase productivity. However, Furnham found that if pay does not meet expectations or there is disparity, motivation and performance is negatively affected. Further, uniform pay adjustments are less motivational than merit based increases. Finally, his study showed that employees would exchange pay for other benefits like time off and job security.

Policies. Herzberg (Herzberg et al., 1959; Herzberg, 1966) tied this factor to employee perceptions about communications, administrative practices, and benefits overall. In this regard, policies, procedures, and practices that reflect a genuine interest in employee well-being encourage organizational commitment (Anuna, 1997). However, if the actual leadership style is inconsistent with extant policy, job satisfaction and commitment will decline (Blevins, 2005; Witt & Kacmar, 2000).

Job Security. This factor refers to objective considerations that could affect job stability or tenure (Herzberg et al., 1959; Herzberg, 1966). It also concerns matters such as level of responsibility and opportunity for advancement (Ito & Brotheridge, 2007). Reductions in these areas lead to lower levels of commitment. Organizational instability and ongoing change with potentially negative consequences undermine job security (Cooper, 2006).

Status. According to Herzberg, (Herzberg et al., 1959; Herzberg, 1966), this factor is defined as any consideration that would enhance an employee's sense of

importance, prominence, or position in life. Examples would be a big office, company provided transportation, or any other special privilege that would distinguish one employee from another. Several studies have found a positive correlation between status and job satisfaction (Rostamy, Hosseini, Azar, Khaef-Elahi, & Hassanzadeh, 2008).

Personal Life. This factor concerns how an employee's job affects his/her personal situation (Herzberg et al., 1959; Herzberg, 1966). For example, a study by Saltzstein, Ting, and Saltzstein (2001) found that most employees have personal responsibilities that recur daily which may require their attention before and/or after work. They explained that demographic and sociological shifts since Herzberg's report have further complicated this factor beyond initial findings.

Intrinsic Factors

On the other side of the model are the intrinsic factors such as achievement, recognition, the work itself, responsibility, advancement, and growth (Herzberg et al., 1959; Herzberg, 1966). By contrast, their absence was not necessarily dissatisfying. However, when present, they could be a motivational force. Accordingly, motivation could be enhanced by restructuring work with increased opportunities for advancement, personal development, recognition, and responsibility (Ramlall, 2004).

Achievement. Herzberg (Herzberg et al., 1959; Herzberg, 1966) associated this factor with feelings of accomplishment such as completing a task or resolving an issue (Knight & Westbrook, 1999). Employees who demonstrate a strong orientation for achievement may be characterized by working long hours, accepting challenging tasks, and a willingness to do whatever it takes to reach maximum outcomes (Scott, Moore & Micelli, 1997).

Recognition. According to Herzberg (Herzberg et al., 1959; Herzberg, 1966), this factor is related to positive or negative feedback about an accomplishment. Recognition is an effective means of motivation and a signal from supervision to employees that they are valued for their contributions (Richardson, 2003). Unfortunately, this well-established concept is all too often underutilized by leaders (Nelson, 2002). Indeed, Nelson found that even non-monetary recognition results in higher levels of motivation. In addition, constructive reinforcement also promotes individual growth and development (Jackson, 2001).

Responsibility. This factor pertains to control over one's work or that of others (Herzberg et al., 1959; Herzberg, 1966). A meta-analysis by Dole and Schroeder (2001) found that job satisfaction increased and the intent to quit decreased as levels of authority over the job grew. This finding corroborates Herzberg's conclusion.

Advancement. Herzberg (Herzberg et al., 1959; Herzberg, 1966) found that this factor relates to an employee's attitude following a change in position or status. The positive relationship between organizational support for this factor and improved job satisfaction along with a lower degree of intent to quit was found in a study by Jawahar and Hemmasi (2006).

Growth. While advancement pertains to an actual change, growth is about the potential for advancement in the future (Herzberg et al., 1959; Herzberg, 1966). The positive relationship between this factor and job satisfaction was found in a study conducted by Stein and Craft in 2007. This growth can take the form of vertical or horizontal mobility, developmental opportunities, or acquisition of skills (Carmeli, Shalom, & Weisberg, 2007).

The Work. This aspect of Herzberg's (Herzberg et al., 1959; Herzberg, 1966) theory concerns personal employee attitudes about the job requirements and assigned tasks (Freed, 2003). This includes complexity and scope of work. Research reveals that employee perceptions of their work have a direct influence on job satisfaction (Freed, 2003; Wong, Hui, & Law, 1998). Thus, job design is an important consideration in the elevation of motivational levels among workers.

Criticism of the Theory

It is noteworthy that Herzberg's (Herzberg et al., 1959; Herzberg, 1966) theory has not been without a fair amount of criticism. Initially, the theory's underlying methodology was challenged as being too limited (Hazer, 1976; House & Wigdor, 1967; Ondrack, 1974). Some argued for a finding of scaling bias in his method of experimentation which was based on semi-structured interviews (Gordon & Pryor, 1974; Trexler, French & Metersky, 1973). Others believed that there was simply no empirical support for the theory and it oversimplified the nature of job satisfaction (Graham & Messner, 1998; Hulin & Smith, 1967; King, 1970). When applied in a study concerning the prediction of turnover, it was found to be confusing and imprecise (Atchison & Lefferts, 1972).

An empirical test of the theory involving accountants by Brenner, Cormack and Weinstein (1971) found questionable results. More specifically, the research findings indicated that job satisfaction, as well as dissatisfaction, was received from both intrinsic and extrinsic factors.

Indeed, when it was tested in an actual solid waste management setting, the researchers found conflicting results for two sub-samples which were opposite of

Herzberg's predictions (Locke & Whiting, 1974). More specifically, motivators were found to be more likely to be dissatisfiers and hygiene factors appeared as satisfiers for those two categories. With respect to the theory, the researchers concluded that, "...little support for its main tenets was found at any job level in this study" (p. 154).

Locke (1978) continued to express his criticism of Herzberg's (Herzberg et al., 1959; Herzberg, 1966) failure to incorporate goal setting into employee motivation. He, along with others, was uncomfortable with Herzberg's challenge to, "...the dominant Anglo-American 'economic man' paradigm" (Bassett-Jones & Lloyd, 2005, p. 941). Of course, Locke was also a rival of Herzberg and took pains to promote his own point of view (Tietjen & Myers, 1998).

Ratavoot and Ogunlana (2003) contend that the contradictory results from studies that have tested the theory are explained by the differences in occupations and workplaces. Thus, the theory can be subject to distortion if it is applied in a unique setting.

Defense of the Theory

Notwithstanding the foregoing, the theory, as a framework, has provided a valuable insight into some job satisfaction factors and their influence on turnover in some situations (Myers, 1964). Its controversial nature comes from its challenge to the unquestioned conventional management wisdom of the time that satisfaction and dissatisfaction were at the opposite ends of the same continuum with a neutral midpoint (Behling, Labovitz, & Kosmo, 1968). Behling et al. (1968) called attention to several studies which replicated Herzberg's methodology, including their own, that "almost without exception, gives results supporting the Herzberg duality" (p. 106).

At about the same time that the theory was under attack, Grollman (1974) found the theory to be valid in a study of professional education programs. Even Locke and Whiting (1974) had to admit to findings of partial validity of the theory in their study of solid waste management employees.

Subsequently, O'Reilly and Caldwell (1980) found support for the theory in a study of MBA graduates and their original job selection criteria. It was hypothesized that those who made their decisions based on intrinsic criteria would be more satisfied and committed to their work than those who opted for extrinsic factors. The results revealed that both factors affected job satisfaction and commitment, albeit in different ways, as Herzberg (Herzberg et al., 1959) predicted.

In 1999, Knight and Westbrook applied the theory to research concerning telecommuting employees and found them motivated by the same Herzberg factors. This was particularly significant in that it linked the theory with employees from the industrial revolution to more contemporary settings. Similarly, DeShields, Kara, and Kaynak (2005) found their results in a study of satisfaction and retention among college business students to be consistent with Herzberg's theory.

Nearly 50 years after it was developed, Bassett-Jones and Lloyd (2005) revisited Herzberg's theory to determine whether it retained support over time. The results from the analysis of more than 3209 anonymous survey responses from men and women in a variety of organizational settings were consistent with Herzberg's prediction that intrinsic factors outweigh extrinsic factors in determining job satisfaction.

More recently, Udechukwu (2007) applied the theory to a correctional setting and found support for Herzberg and the greater influence of intrinsic factors, in particular.

However, he concluded that both intrinsic and extrinsic factors were important and each one could influence job satisfaction.

A study by Daniel Sachau (2007) calls attention to the rising interest in Herzberg within the field of positive psychology whose basic tenets find common ground with motivation-hygiene theory. Accordingly, it is worthy of resurrection in their field as a general framework to help explain the dual nature of happiness/unhappiness, satisfaction/dissatisfaction, intrinsic/extrinsic motivation, and mastery/status.

Thus, Herzberg's theory is expected to be useful for this and future study.

Application of the Theory to the Solid Waste Management Industry

There have been three prior studies involving job satisfaction among mixed classifications in the solid waste management industry. None of them focused on any one job classification, like drivers. All three applied Herzberg's Two-Factor Theory to the research. Another study of refuse truck drivers in Amsterdam examined the human factors associated with job rotation (Kuijer, de Vries, Beek, Dieen, Visser, & Frings-Dresen, 2004). Otherwise, there is a paucity of information on the job satisfaction of drivers in the solid waste industry. Indeed, the only other reference is in the facetious book title, "Why Aren't Economists as Important as Garbagemen" (Colander, 1991).

As mentioned above, Locke and Whiting (1974) studied a national sampling of 911 public and private sector solid waste management employees comprised of both blue and white collar classifications. A 46 item questionnaire was used to guide the conduct of separate interviews with all participants. The reported results found limited support for the theory. The researchers concluded that job satisfaction among the white-collar

employees was influenced most by intrinsic factors, while the blue-collar categories were more often influenced by extrinsic factors.

Walsh (1982) compared garbage men to professors to determine whether occupational status was a predictor of job dissatisfaction. He found that occupational prestige was a poor predictor of job dissatisfaction and there was no remarkable difference between the two groups.

The third study involved “an under-studied population” of 64 blue-collar public service workers, 21 of which were classified as “sanitation workers” (Young, Worchel, & Woehr, 1998, p. 339). The study was designed to measure organizational commitment based on the influence of intrinsic and extrinsic factors. It was hypothesized that, contrary to Herzberg’s theory, extrinsic rewards (e.g. pay satisfaction) would have the greatest influence on commitment among blue-collar employees. The actual results found support for intrinsic and extrinsic factors being equally predictive of commitment. The researchers suggested that further study be done to determine how intrinsic factors may be better deployed to enhance job satisfaction and organizational commitment to improve operational performance.

Job Satisfaction

Job satisfaction is a construct that describes “how people feel about their jobs and different aspects of their jobs” (Spector, 1997, p. 2). Edwin Locke (1976) called it the “positive emotional state resulting from the appraisal of one’s job or job experiences” (p. 1300; Glisson & Durick, 1988). No one theory can cover the full spectrum of job satisfaction aspects (Chou & Robert, 2008). It can be the cause of behavior, part of a behavior cycle, or part of a regulatory system (Faulkenburg & Schyns, 2007). Indeed, “it

is an extent to which one feels positively or negatively about the intrinsic and/or extrinsic aspects of one's job" (Boles, Madupalli, Rutherford, & Wood, 2007, p. 312; Cowin, Johnson, Craven, & March, 2008). In any event, it has a complex relationship with affective commitment and turnover.

In a study involving correctional officers, Udechukwu (2007) also separated job satisfaction into extrinsic and intrinsic factors. As viewed by Herzberg (1966), extrinsic factors centered on working conditions and intrinsic factors were more closely aligned with the job itself. Udechukwu (2007) concluded that intrinsic factors came ahead of extrinsic factors in determining an intention to quit. This finding was consistent with those of Tang, Kim, and Tang (2000) and Randolph and Johnson (2005) in their studies of mental health workers and rehabilitation professionals, respectively. Bassett-Jones and Lloyd (2005) further validated it in their study of 32 large organizations. However, Udechukwu (2007) was quick to add that both are important factors and either could influence turnover.

In a study of nurses, Coomber and Barribal (2007) found that increasing job satisfaction resulted in decreased turnover. Significantly, they found this result to be consistent with those involving non-nursing workers.

Similarly, when the influence of job satisfaction factors on turnover was researched in a study involving truck drivers, a direct correlation was found (Richard, LeMay, Taylor, & Turner, 1994). In a later study, Stephenson and Fox (1996) found support for Richard et al. (1994) and called attention to a need for a greater focus on improvements in driver independence, appropriate rewards, procedural justice, occupational pride, safety, recognition, appreciation, reliable equipment, and training to

enhance job satisfaction and reduce turnover. More recently, supervision, pay, equipment, and relationships with dispatchers were also found to have a significant influence on driver job satisfaction and intentions to quit (Garver, Williams, & Taylor, 2008).

Job satisfaction is one of the more commonly proposed antecedents to predicting turnover (Tett & Meyer, 1993). But, Tett and Meyer (1993) went further and found that the influence of job satisfaction on the intention to quit was different than that of commitment. More specifically, they concluded that job satisfaction had only an indirect impact on leaving. Hwang and Kuo (2006) came to a similar conclusion in their study of government employees.

In support of Tett and Meyer (1993), Elangovan (2001) found that satisfaction is more of a component of commitment and, therefore, was not causally linked to turnover. However, he also noted that supporting research, like his, was sparse and sometimes contradictory. In this regard, he calls attention to a study which found satisfaction to be a component of commitment (Porter, Steers, Mowday, & Boulian, 1974), but then one of its authors later proposed that satisfaction had an influence on commitment (Steers, 1977). Later, Williams, and Hazer (1986) found a causal effect of satisfaction on commitment, notwithstanding Bateman and Strasser's (1984) earlier finding of just the opposite.

In other studies, job satisfaction has been found to, "...reflect a more immediate and changeable evaluative reaction to particular aspects of the job" (Mowday, Steers, & Porter, 1979, p. 236). Thus, it would not necessarily prompt an immediate reversal of an otherwise positive commitment to an organization (Peters, Bhagat, & O'Connor, 1981).

However, Peters et al. (1981) suggest that more research be done to determine the influence of job satisfaction on commitment and the intention to quit.

There is also research that calls upon employers to carefully monitor the extrinsic and intrinsic job satisfaction factors which influence turnover intentions since those factors involve matters over which supervisors may have significant influence (Firth, Mellor, Moore, & Loquet, 2003). The positive impact on operational effectiveness in terms of lower costs, knowledge retention, and workforce continuity alone supports their conclusion. In this regard, there is an opportunity for employee commitment to the organization to be enhanced and the intention to quit reduced, as well.

In a study concerning the influence of intrinsic and extrinsic job satisfaction factors on over 300 rehabilitation professionals, the results supported intrinsic factors having a positive impact of career satisfaction as well as retention (Randolph & Johnson, 2005). The finding was contrary to their prediction that competitive pay and the like would lead the way. Strong intrinsic satisfaction mediates against turnover even among employees with a strong money ethic (Tang, Kim, & Tang, 2000). This implies that managers should shift their thinking and find ways to address these critical motivating factors along with traditional benefits to enhance their opportunity for competitive advantage.

In a study measuring the effects of job satisfaction and affective commitment on the turnover intention, both were found to function as mediators of turnover (Chiu & Francesco, 2003). However, job satisfaction was deemed to be preeminent.

Affective Commitment

Whereas job satisfaction is the extent in which employees like their work, affective commitment involves one's loyalty to the organization (Jernigan, Beggs, & Kohut, 2002; Meyer & Allen, 1997). Examples of factors influencing affective commitment are decentralization, fair policy development, tenure, challenging work, positive relationships with co-workers, and transformational leadership (Cicekli, 2008). Employees with a high degree of affective commitment are more likely to contribute more and remain with an organization because that is what they want. Thus, the intention to quit is reduced.

Elangovan (2001) found that only affective commitment is directly related to turnover. He also commented that studies seeking to determine whether job satisfaction alone is the causal link to turnover are "spurious" (p.163). Rather, he contends that his study supports the conclusion that job satisfaction can only foster commitment.

Interestingly, Price (2001) argued that, contrary to popular views, job satisfaction and commitment have no significant relationship. He based his claim on there being too many common determinants, such as social support, promotional chances, and distributive justice (Currivan, 1999).

Another surprising finding came from a study that concluded that organizational commitment had no significant relationship with turnover (Morrow et al., 2005). Instead, it found that whether employment conditions offered readily available alternative jobs was a more valid predictor of turnover. This study highlights the significance of "contextual applicability" (p. 690).

For the most part, the research follows the study by Peters et al. (1981) that found affective organizational commitment is in fact negatively related to turnover. The rationale for their conclusion was that commitment is a, "...more stable and slowly evolving attitude than satisfaction, which reflects a more immediate and changeable evaluative reaction to particular aspects of the job" (p. 74). Accordingly, it may have a greater influence on the intention to leave than job satisfaction.

Intention to Quit

Heretofore, we have reviewed certain antecedents to an employee's intention to quit. Now we turn to perhaps the most important and immediate antecedent to turnover decisions, the intention to quit itself (Elangovan, 2001). According to Elangovan (2001), intention to quit is "an attitudinal orientation or a cognitive manifestation of the behavioral intention to quit" (p.159).

There is a wide range of opinion on the antecedents to the intention to quit. Job satisfaction and affective commitment lead the way and are discussed above. Job stress can also play a role (Firth et al., 2004). The quality of the leader-member exchange has been found to be a factor, as well (Morrow et al., 2005). So is the influence of social support (Price, 2001). Dispositional traits have also been studied and found to have a significant influence on the intention to quit (Chiu & Francesco, 2003). There is also evidence that the "voice" provided by unionization has a positive influence on job satisfaction and commitment and reduces the intent to quit (Abraham, Friedman, & Thomas, 2005).

The intent to quit is also influenced by external factors which may create dissatisfaction (Hom & Kinicki, 2001). These considerations include inter-role conflicts,

incompatible role demands, job avoidance, and strong labor markets which offer attractive alternatives. Russ and McNeilly (1995) found that experience and performance have a moderating effect on satisfaction, commitment, and turnover intentions.

In an updated meta-analysis of 42 studies concerning the antecedents to turnover, Griffeth, Hom, and Gaertner (2000) found that commitment was a better predictor of turnover than job satisfaction. Other predictors were job search activity, comparison of alternatives, withdrawal cognitions, and quit intentions. To a lesser extent, work environment, job content, autonomy, work group cohesion, leadership, and distributive justice came into play. Demographic attributes had little influence except for tenure and number of dependents. Turnover rates were unaffected by gender. Personality factors were not considered in this study. This study illustrates that there is more to consider than just job satisfaction and affective commitment when evaluating turnover. For example, job fit, specific job classifications, and industries must be taken into account, too (Price, 2001).

The previous discussion of research about the antecedents to the intention to quit reflects results that have remained relatively unchanged for 50 years (Mitchell, Holtom, & Lee, 2001). Yet, the means for accurately forecasting turnover remains elusive since the event does not always turn on rational decision making (Hong & Chao, 2007).

Mixed Evidence of Causal Relationship

The complex relationship between job satisfaction and commitment has been the subject of many studies (Falkenburg & Schyns, 2007; Rayton, 2006; Yousef, 2002). However, there is still an open question as to whether satisfaction is an antecedent to commitment or vice-versa (Bateman & Strasser, 1984; Curry, Wakefield, Price, &

Mueller, 1986; Williams & Hazer, 1986; Wong, Chun, & Law, 1995). A third view is that the relationship is reciprocal and may vary with time (Farkas & Tetrick, 1989).

Moreover, the effects of both on organizational performance are unsettled (Falkenburg & Schyns, 2007; Rayton, 2006). Thus, further investigation continues to be of interest.

Tett and Meyer (1993) advanced the following theoretical models of the relationship between job satisfaction, affective commitment, and the intent to quit (Trimble, 2006, p. 357). According to Tett and Meyer (1993), the first model proposes that job satisfaction and affective commitment are equally influential of the intent to quit. Their second model indicates that job satisfaction mediates in favor of affective commitment which has a positive influence on the intent to quit. Tett and Meyer's (1993) third model simply reverses the roles of job satisfaction and affective commitment in terms of their mediating influence on the intent to quit.

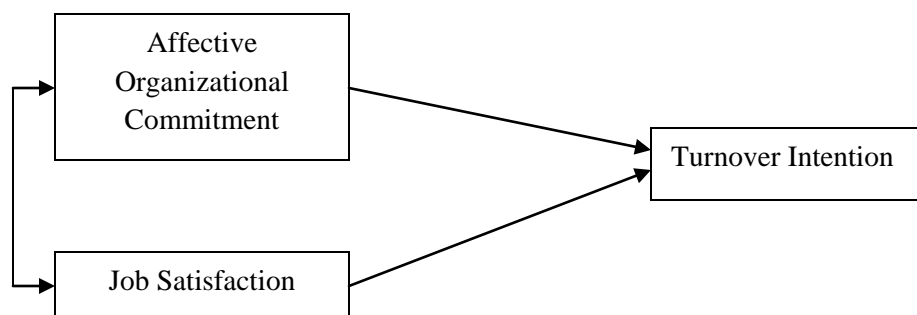


Figure 4. Model 1

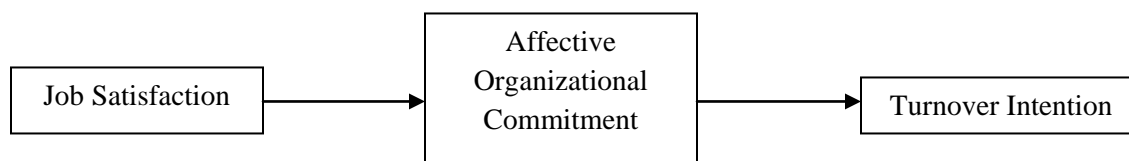


Figure 5. Model 2

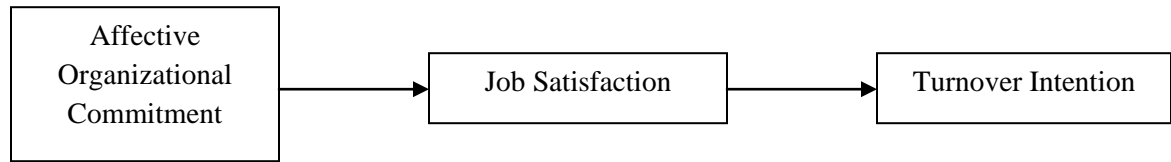


Figure 6. Model 3

In his study involving 468 missionaries, Trimble found that Model 2 was preferred as his results showed that affective commitment had a mediating role between job satisfaction and the intent to quit. Thus, organizational devotion was not unconditional.

In a study of two organizations, Falkenburg and Schyns (2007) administered questionnaires to groups of 67 and 68 participants, respectively. Based on the results, they concluded that the relationship between job satisfaction and the intent to quit was lower for employees with high commitment. Within this relatively small sampling, they found that the constructs overlapped. They recommended that interventions by practitioners focus on the overall pattern of employee attitudes to maximize organizational performance.

To explore further the ongoing dispute regarding the relationship between job satisfaction and commitment, Huang and Hsiao (2007) conducted a study among 3037 randomly selected employees from six major industries. The results were supportive of their hypothesis that job satisfaction and commitment were reciprocally related. In addition, they found that job characteristics had the greatest influence on both constructs followed by working conditions and organizational climate. Therefore, they suggested that practitioners consider both job content and leadership style to influence positively satisfaction and commitment.

In 2001, Elangovan conducted research aimed at resolving the confusion over the relationship between job satisfaction and commitment and their effect on turnover. He noted, too, that the research was “sparse” and often contradictory (p. 159). Based on the survey responses from a sampling of 155 employed graduate business students, the results found that only commitment influenced the intent to quit. This reciprocal link was contrary to the relationship between turnover intentions and satisfaction. In this regard, satisfaction had no direct affect on turnover intent unless it first affected commitment. This finding was consistent with those of Williams and Hazer (1986). Thus, Elangovan (2001) recommended that interventions to reduce turnover should focus more on commitment as satisfaction factors alone will not suffice.

A meta-analysis of commitment by Meyer, Stanley, Herscovitch, and Topolnytsky (2001) found that affective commitment was strongly correlated with job satisfaction and job performance. Although they rejected the notion of construct redundancy, they endorsed the idea that both should be addressed contemporaneously to better manage employee behavior. Indeed, they propose that carefully managed experiences may be more effective than attempts to select employees with predisposed affective commitment. Finally, affective commitment was negatively correlated with turnover and withdrawal cognitions.

By contrast, the research conducted by Wong, Hui, and Law (1995) disagreed with prior studies insofar as satisfaction predicting commitment. They found that satisfaction had no influence on commitment or the intent to quit. Nevertheless, they agreed with Williams and Hazer (1986) that, “...failing to include both satisfaction and commitment should be viewed cautiously” (p. 230).

The caution expressed by Wong et al. (1995) was supported by Yousef's (2002) research which found that job satisfaction directly and positively influences affective commitment. This, in turn, mediates against the intent to quit (Schaubroeck, Cotton, & Jennings, 1989).

The Impact of Unionization

There is a great deal of research supporting the notion that job dissatisfaction is greater among union workers than their non-union counterparts (Hersch & Stone, 1990). Nevertheless, Gordon, and Denisi (1995) found that union membership had no effect on either job satisfaction or the intent to quit. When Hammer and Avgar (2005) studied the impact of unions on job satisfaction, commitment, and turnover, they found that job satisfaction was more related to the leader-member exchange, job content, autonomy, wages, expectations, and the quality of the labor relations equation than union membership. Further, the literature had paid little attention to the effects of unionization on organizational commitment. In any event, they found little correlation between unionization itself, organizational commitment, and the intent to quit.

More recently, Abraham, Friedman, and Thomas (2008) found that unionization mediates against turnover. They explained that turnover is reduced if employees have a voice which provides an opportunity to alleviate dissatisfaction with wages, hours, and other terms and conditions of employment. Interestingly, they also found that union workers were less satisfied with their jobs.

Finally, in a study of unionization and organizational commitments, the researchers found that job satisfaction was highest where employees were dually committed to both the union and the organization because of a cooperative relationship

(Carson, Carson, Birkenmeier, & Toma, 2006). Thus, a more confrontational and competitive environment is counterproductive.

In sum, the literature demonstrates that there is still considerable opportunity for further development of the body of knowledge concerning the relationship between job satisfaction, affective commitment, and the intention to quit. In addition, the lingering debate over the validity of Herzberg's Two-Factor Theory suggests that additional study would be appropriate to contribute toward the resolution of the question (DeShields et al., 2005; House & Wigdor, 1967).

CHAPTER III

Methodology

As stated above, the purpose of this research was to determine the antecedents to the intention to quit in an occupation characterized by a high degree of voluntary attrition. The introduction to the study calls attention to the opportunities that exist for improvements in job satisfaction and organizational commitment which may influence turnover. Indeed, the literature review supports the need for further examination of the subject area.

This chapter describes the research design, defines the sample, explains the survey instruments, and the protocol that was engaged to conduct the study. It also sets forth the method for analyzing the data. In this regard, the rationale for instrument selections, their reliability estimates, and the method of analysis are discussed against the background of analogous research which supports the direction of the methodology. Previous studies, like the ones conducted by Cetin (2006), Elangovan (2001), Falkenberg and Schyns (2007), Sims (2002), and Udechukwu (2007), to name a few, served as polestars for methodology.

Research Design

This empirical research utilized the descriptive correlational research method to examine the extent in which differences between variables are related (Leedy & Ormond, 2005). In this study, the relationship between intrinsic and extrinsic job satisfaction factors and affective commitment on the intention to quit are examined.

The study was administered on location where the three surveys designed to measure intrinsic and extrinsic job satisfaction factors, affective commitment, and the

intention to quit were completed by the participants. Demographic data was collected, too. Participation was voluntary, individual responses are confidential, and the subjects will remain anonymous.

Population and Sample. The participating organizations are both in the solid waste management industry and granted written permission for involvement in the research. To protect their identities, the publicly traded employer with nationwide operations will be referred to as Company A. The other organization is a privately held company with regional operations in the southeastern United States and will be referred to as Company B. Both provided access to their truck drivers currently working in their commercial, industrial, and residential lines of business. It was expected that at least 360 truck drivers randomly selected from each of these lines of business would participate in the study by completing the surveys at their respective location. In actuality, 380 completed surveys were obtained. This sample was taken from a very large population. Accordingly, it is more than sufficient to obtain statistically valid results (Leedy & Ormond, 2005).

The participants from Company A were divided between unionized and non-union employees. The union employees are from Chicago, Illinois, and the non-union employees are from Indianapolis, Indiana. The employees from Company B are non-union and work in and around Raleigh, North Carolina.

Survey Instruments

The survey instruments selected for this research were the short form Minnesota Satisfaction Questionnaire (MSQ) (Weiss, Dawis, England, & Lofquist, 1967); Meyer, Allen & Smith's (1993) Affective Commitment Questionnaire; and Colarelli's (1984)

Intention to Quit Scale. All of them are designed on Likert type scales and, as discussed in detail below, have been found to have reliability estimates consistent with Nunally's (1978) recommendation of 0.70 as being sufficient for most research. Scoring for all three questionnaires was by the total score of each item to determine levels of job satisfaction, affective commitment, and intention to quit, respectively.

Job Satisfaction. The short form MSQ distinguishes intrinsic and extrinsic factors (Weiss et al., 1967). This makes it an appropriate fit for this research. More specifically, the measures for the intrinsic factors are activity, independence, variety, advancement, recognition, moral values, achievement, social service, authority, ability utilization, creativity, responsibility, and achievement. These are represented on the scale by items 1-3, 7, 9-11, 14-16, 19, and 20. The measured extrinsic factors are company policies, social status, compensation, supervision-technical, supervision-human relations, working conditions, co-workers, and security. These are represented on the scale by items 4-6, 8, 12-13, 17, and 18. The 5-point Likert type scale provides choices ranging from "not satisfied" (1) to "extremely satisfied" (5).

This instrument had been used in other studies and proved to be reliable. For example, when Falkenburg and Schyns (2007) used the same questionnaire in a similar study involving samples from two organizations, the Cronbach alpha was 0.93 and 0.92, respectively. In Elangovan's (2001) study of job satisfaction, commitment, and intention to quit, the reliability analysis for this instrument showed an alpha of 0.89. Sims (2002) used the questionnaire in a study of social bonding theory and found an alpha of 0.89. Further, the use of the instrument in Udechukwu's (2007) study of job satisfaction and turnover in a correctional setting found an alpha of 0.88. Finally, when the scale was

applied in a study of job satisfaction and commitment among academics by Cetin (2006), the alpha coefficient was 0.86932.

Accordingly, the MSQ is reliable and has all of the qualities to fit this study.

Hence, its selection.

Affective Commitment. The 18 item questionnaire developed by Meyer et al. (1993) has three sub-scales with six questions each that measure affective, continuance, and normative commitment using a 7-point Likert type scale that provides a range of choices from “strongly disagree” (1) to “strongly agree” (7). For this research, only the first sub-scale regarding affective commitment was employed which is an acceptable adaptation of the scale (Fu, Bolander, & Jones, 2009).

Meyer and Allen (1997) reported that the median reliability for affective commitment on their scale was 0.85. Cetin’s (2006) adaptation of the scale in the aforementioned study of academics found the alpha for affective commitment to be 0.82. Yousef (2002) used the scale and got a Cronbach’s alpha of 0.89 for affective commitment in his study which included job satisfaction. Sims (2002) got an alpha of 0.84 for the affective commitment scale in her study of social bonding theory. In the aforementioned study by Falkenburg and Schyns (2007), the scale revealed an alpha of 0.77 for affective commitment. For his research on job satisfaction and commitment, Udechukwu’s (2007) alpha for affective commitment was 0.79. Thus, it is appropriate for this research.

Intention to Quit. This variable was measured with a three item instrument by Colarelli (1984) that uses 5-point Likert type scale ranging from “strongly disagree” (1) to “strongly agree” (5). With respect to reliability, Hsu’s (2002) study reported an alpha

of 0.89 for this scale. Udechukwu's (2007) got a reliability estimate of 0.84 when he used the scale for his study. This scale had better reliability estimates than the considered alternative scale by Arnold and Feldman (1982) which had an alpha of 0.72 when utilized by Elangovan (2001). Based on the foregoing, the Colarelli (1984) scale was selected for this research.

Demographics. In addition to responding to the questionnaires, participants were asked to complete a form asking for certain demographic data. More specifically, they were asked for general information such as gender, age, tenure, job classification, and education level.

Sampling Method

Arrangements were made for a date and time certain for the data collector to personally visit each location and administer the surveys during working hours. A comfortable private room with tables and chairs was provided at each location. Surveys were administered to successive groups of no more than 25 participants until the total sample was obtained.

The data collector introduced himself, gave a full explanation of the study, and read aloud instructions for survey completion. Included in the introduction was information about the drivers' random selection, voluntary participation, and the confidentiality of the process. They were also informed of their right to decline participation without consequences. If any question concerning participant literacy appeared, all demographic and survey questions would have been read aloud to the group. Such was not the case. All participants were afforded an opportunity to ask the researcher clarifying questions.

The first page of the surveys asked for demographic data about gender, age, tenure, job classification, and level of education. The order in which the questionnaires were presented was first job satisfaction, then affective commitment, and finally, intention to quit.

Only the survey administrator was in the room with the participants during the survey administration. The researcher distributed and collected completed forms which will remain in his possession and be securely maintained at his home office in Weston, Florida. As anticipated, survey administration took no more than 30 minutes per group.

Research Questions

The research questions are the same as those listed in the first chapter.

1. Are intrinsic and extrinsic job satisfaction factors negatively related to the intent to quit?
2. Is affective commitment negatively related to the intent to quit?
3. Do intrinsic and extrinsic job satisfaction factors mediate in favor of affective commitment?

Hypotheses

It is hypothesized that drivers with higher measures of extrinsic and intrinsic job satisfaction factors and affective commitment are less likely to intend to leave an organization.

H1a: Extrinsic job satisfaction for drivers is negatively related to their intention to leave the organization.

H1o: Extrinsic job satisfaction for drivers is not related to their intention to leave the organization.

H2a: Intrinsic job satisfaction for drivers is negatively related to their intention to leave the organization.

H2o: Intrinsic job satisfaction for drivers is not related to their intention to leave the organization.

H3a: Affective commitment for drivers is negatively related to their intention to leave the organization.

H3o: Affective commitment for drivers is not related to their intention to leave the organization.

Statistical Techniques

The data was analyzed using the Statistical Package for the Social Sciences (SPSS) Graduate Pack 16.0 with Amos. Pearson's Product-Moment Correlation was used to determine the correlation between the job satisfaction factors, affective commitment, and the intention to quit. Independent Samples t-Tests were used to test the difference between groups such as union versus non-union, public versus privately held companies, and between lines of business. Descriptive Statistics was also used to gain another dimension into appropriate data interpretation. This battery of statistical techniques was applied to each of the hypotheses.

In summary, this chapter has explained how the methodology contributed to the effective analysis of the research aimed at determining the influence of job satisfaction factors and affective commitment on voluntary attrition. The appropriateness of the research instruments and their high reliability estimates has been shown by their utility in prior research. The random sample was sufficient given the large population and the administration protocols protected the integrity of the process as well as participant confidentiality and anonymity (Leedy & Ormond, 2005). The statistical techniques provide an appropriate analysis and determine whether the hypotheses are supported

(Cetin, 2006; Elangovan, 2001; Falkenberg & Schyns, 2007; Sims, 2002; Udechukwu, 2007). Thus, the purpose of the study, its place in the literature, and the research methodology has been clearly defined.

CHAPTER IV

Analysis and Presentation of Findings

The previous chapter described the method and manner in which the empirical data was collected and the statistical techniques that were employed for analysis. This chapter sets forth the findings of the process and explains the results.

The purpose of this quantitative correlation research was to determine the antecedents to the intention to quit in an occupation characterized by a high degree of voluntary attrition. More specifically, the research seeks to determine the influence of intrinsic and extrinsic job satisfaction factors and affective commitment on the intent to quit among drivers in the solid waste management industry. The results reveal opportunities for employers to align human capital strategies with key job satisfaction factors to gain affective commitment and improve operational performance. Costs would also decline as a result of lower turnover which would accompany higher measures of extrinsic and intrinsic job satisfaction factors as well as affective commitment. Comparisons within the three lines of business and between union and non-union operations are included in the results.

In addition, the relationship between the variables is reported as well as the significance of the demographic implications. The findings also include an analysis of the correlations between the respective groups, positions, age, and tenure. Finally, there is also a discussion of whether the respective Hypotheses were supported.

Data Collection

The three questionnaires described in the previous chapter were administered to 382 voluntary participants in accord with the specified protocols at each of the three

operations during successive weeks in the month of January, 2010. More specifically, the survey instruments selected for this research were the short form Minnesota Satisfaction Questionnaire (MSQ) (Weiss, Dawis, England, & Lofquist, 1967); Meyer, Allen & Smith's (1993) Affective Commitment Questionnaire; and Colarelli's (1984) Intention to Quit Scale. The participants were from the publicly listed operation; then the private company, which was followed by the unionized operation. The completed questionnaires were hand carried back to the researcher's office, coded, and entered into an SPSS data file. Only two questionnaires were spoiled and unusable.

With regard to coding, the publicly traded operation was designated as Group 1; the privately held operation is Group 2; and Group 3 is the unionized operation. Similarly, commercial drivers are coded as Position 1; industrial drivers are Position 2; and Position 3 is for the residential drivers. Age and tenure are shown in years. Males are coded as "1", and females as "2". Education levels are coded as, "1" being less than high school; "2" is some high school; "3" means completed high school; "4" is some college; and "5" is completed college.

Descriptive Statistics

Demographics. The descriptive statistics and frequencies for demographics in the overall sample are shown below in Table 1. This Table also reflects the comparisons between Groups and Positions.

Table 1

Descriptive Statistics and Frequencies for Demographics in the Overall Sample

	N	Male	Female	Mean		
				Age	Tenure	Education
Overall	380	376	4	42.23	10.54	3.14
Public	104	101	3	40.54	9.34	3.20
Private	147	146	1	43.05	7.55	3.14
Union	129	129	0	42.66	14.91	3.10
Commercial	132	131	1	43.45	12.44	3.25
Industrial	64	64	0	47.27	13.58	3.22
Residential	184	181	3	39.60	8.12	3.04

A fact revealed by Table 1 is the sparsity of females in the sampling. This is not surprising as the occupation can be physically demanding and the industry's outreach to women for this non-traditional work is in its early stages.

The difference in the level of education across the categories is unremarkable except for there being little variation from the overall mean of 3.14 which means that the average driver has at least a high school education. Similarly, the average ages between the respective operations vary only slightly from the overall average of 42.23 years. However, the difference is more significant when the commercial and industrial positions are compared with residential. This is similar to the differences in tenure between the positions. Among the three positions, the residential work is most often entry level or a prerequisite to advancing to the more skilled commercial and industrial jobs. Thus, it was expected that residential drivers would be on the average younger and less tenured.

The difference in average tenure between the operations is also noteworthy. In this regard, the unionized operation with a 14.91 years average has a considerable advantage over the public and private operations that average 9.34 and 7.55 years, respectively. This distinction may also be attributable to the age of the business operation and service mix.

The disparity in the distribution of participants between the lines of business (i.e. positions) was also expected. The industrial position is dramatically lower due to the weak construction activity in the current poor economy. Accordingly, there are fewer employees in this position due to lack of work. To a lesser extent, commercial work would be affected economically. Traditionally, the most resilient and stable line of business is residential garbage collection.

Variables. The descriptive statistics for each of the 29 variables are shown below in Table 2. Attention is called to the fact that the questionnaires used to measure intrinsic and extrinsic job satisfaction as well as the intent to quit used a 5-point Likert type scale that provided choices ranging from “not satisfied” (1) to “extremely satisfied” (5). The scale used to measure affective commitment had a 7-point Likert type scale that provided a range of choices from “strongly disagree” (1) to “strongly agree” (7). Thus, the mean for these variables are generally higher.

With respect to coding, questions relating to intrinsic and extrinsic job satisfaction factors are shown in Table 2 as “IJS” and “EJS,” respectively. Affective commitment questions are shown as “AC,” and those for the intent to quit are “IQ.” The numbers following the code indicates their actual order on the questionnaire.

Table 2

Descriptive Statistics for Variables

Variables	N	Mean	Standard Deviation
IJS1-Activity	380	3.97	.910
IJS2-Independence	380	4.13	.993
IJS3-Variety	380	3.50	1.059
IJS7-Moral Values	380	3.50	1.066
IJS9-Social Service	380	3.65	.975
IJS10-Authority	380	2.91	1.039
IJS11-Ability Utilization	380	3.38	1.120
IJS14-Advancement	380	2.83	1.164
IJS15-Responsibility	380	3.45	1.097
IJS16-Creativity	380	3.36	1.084
IJS19-Recognition	380	2.90	1.143
IJS20-Achievement	380	3.35	1.041
EJS4-Social Status	380	3.33	1.087
EJS5-Supervision Rel.	380	3.11	1.191
EJS6-Supervision Tech.	380	3.22	1.175
EJS8-Job Security	380	4.07	.993
EJS12-Policies	380	2.71	1.144
EJS13-Pay	380	3.15	1.164
EJS17-Work Conditions	380	3.17	1.002
EJS18-Co-Workers	380	3.25	1.059
AC1-Desire to Stay	380	5.32	1.512
AC2-Own Problems	380	4.05	1.709
AC3-Belonging	380	4.67	1.568
AC4-Attachment	380	4.36	1.547
AC5-Personal Meaning	380	4.58	1.503
AC6-Like Family	380	4.36	1.700
IQ1-Remain 12 Months	380	3.97	1.144
IQ2-Thinking Quit	380	2.30	1.193
IQ3-Seeking New Job	380	1.99	1.108

Reliability Estimates

The cumulative Cronbach's alpha for the scales was .905 which exceeds the .70 threshold suggested by Nunally (1978). Table 3 below shows the reliability of each scale as it relates to the variable measured.

Table 3

Reliability Estimates of Scales

Variable	Items	Cronbach's Alpha
Job Satisfaction	20	.912
Intrinsic	12	.774
Extrinsic	8	.808
Affective Commitment	6	.880
Intent to Quit	3	.623
Cumulative	29	.905

As shown on Table 2, all scales have an alpha that exceeds the suggested threshold except the Intent to Quit scale which reflects .623. For scales with less than 10 items, it can be difficult to reach the suggested minimum threshold (Hair, Black, Babin, Anderson, & Tatham, 2006). In such cases, Hair et al. (2006) find validity where the alpha exceeds .50 and the mean inter-item correlations are above .30. The mean inter-item correlations for the Intent to Quit scale used in this research is .357 which satisfies their guideline for reliability (Hair et al., 2006).

Pearson Product-Moment Correlation

The relationship between intrinsic and extrinsic job satisfaction factors, affective commitment, and the intent to quit was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity, and homoscedasticity.

Individual Questions. Correlation matrices were run in SPSS 16.0 using each of the questions from the three questionnaires. The intrinsic and extrinsic job satisfaction

factors along with the affective commitment variable were correlated with the questions in the intent to quit questionnaire. The results are shown in Table 4 below.

Table 4

Correlations of Job Satisfaction Factors and Affective Commitment with the Intent to Quit

Variable	IQ1 Remain 12 Months	IQ2 Thinking Quit	IQ3 Seeking New Job
IJS1-Activity			
Pearson Correlation	.184**	-.140**	-.160**
Sig. (2-tailed)	.000	.006	.002
IJS2-Independence			
Pearson Correlation	.208**	-.143**	-.181**
Sig. (2-tailed)	.000	.005	.000
IJS3-Variety			
Pearson Correlation	.054	-.184**	-.188**
Sig. (2-tailed)	.290	.000	.000
IJS7-Moral Values			
Pearson Correlation	.283**	-.209**	-.213**
Sig. (2-tailed)	.000	.000	.000
IJS9-Social Service			
Pearson Correlation	.149**	-.164**	-.186**
Sig. (2-tailed)	.004	.001	.000
IJS10-Authority			
Pearson Correlation	.071	-.038	-.063
Sig. (2-tailed)	.168	.462	.224
IJS11-Ability Utilization			
Pearson Correlation	.119*	-.220**	-.240**
Sig. (2-tailed)	.021	.000	.000
IJS14-Advancement			
Pearson Correlation	.127*	-.128*	-.195**
Sig. (2-tailed)	.013	.012	.000
IJS15-Responsibility			
Pearson Correlation	.207**	-.225**	-.208**
Sig. (2-tailed)	.000	.000	.000
IJS16-Creativity			
Pearson Correlation	.154**	-.202**	-.173**
Sig. (2-tailed)	.003	.000	.001
IJS19-Recognition			
Pearson Correlation	.058	-.069	-.053
Sig. (2-tailed)	.258	.177	.306
IJS20-Achievement			
Pearson Correlation	.260**	-.204**	-.185**
Sig. (2-tailed)	.000	.000	.000
EJS4-Social Status			
Pearson Correlation	.066	-.081	-.142**
Sig. (2-tailed)	.201	.115	.005

EJS5-Supervision Rel.			
Pearson Correlation	.092	-.213**	-.233**
Sig. (2-tailed)	.074	.000	.000
EJS6-Supervision Tech.			
Pearson Correlation	.094	-.190**	-.189**
Sig. (2-tailed)	.069	.000	.000
EJS8-Job Security			
Pearson Correlation	.197**	-.201**	-.251**
Sig. (2-tailed)	.000	.000	.000
EJS12-Policies			
Pearson Correlation	.074	-.169**	-.152**
Sig. (2-tailed)	.151	.001	.003
EJS13-Pay			
Pearson Correlation	.238**	-.170**	-.251**
Sig. (2-tailed)	.000	.001	.000
EJS17-Work Conditions			
Pearson Correlation	.184**	-.201**	-.165**
Sig. (2-tailed)	.001	.000	-.001
EJS18-Co-Workers			
Pearson Correlation	.011	-.055	-.006
Sig. (2-tailed)	.832	.282	.904
AC1-Desire to Stay			
Pearson Correlation	.339**	-.389**	-.515**
Sig. (2-tailed)	.000	.000	.000
AC2-Own Problems			
Pearson Correlation	.187**	-.167**	-.213**
Sig. (2-tailed)	.000	.001	.000
AC3-Belonging			
Pearson Correlation	.208**	-.287**	-.310**
Sig. (2-tailed)	.000	.000	.000
AC4-Attachment			
Pearson Correlation	.233**	-.275**	-.300**
Sig. (2-tailed)	.000	.000	.000
AC5-Personal Meaning			
Pearson Correlation	.259**	-.324**	-.297**
Sig. (2-tailed)	.000	.000	.000
AC6-Like Family			
Pearson Correlation	.139**	-.288**	-.260**
Sig. (2-tailed)	.007	.000	.000

N = 380 for all variables; **Correlation is significant at the 0.01 level (2-tailed);

*Correlation is significant at the 0.05 level (2-tailed).

Certain items (IQ2 and IQ3) within the intent to quit variable had negative correlations and both are related with considering or actively pursuing alternative employment. Table 4 demonstrates that among the three independent variables, intrinsic job satisfaction, extrinsic job satisfaction, and affective commitment, affective commitment clearly has the strongest positive and negative influence on the dependent variable, intent to quit. Three job satisfaction factors; authority, recognition, and co-

workers, have no significant independent influence at all on the intent to quit as shown with $p > .05$ for all three items. In addition, four other extrinsic job satisfaction factors such as social status, supervision (relationship and technical), and policies, have only a significant negative influence on the intent to quit. The same is true for variety, which is in the intrinsic job satisfaction category.

Grouped Questions. The questions relating to the four variables (intrinsic and extrinsic job satisfaction, affective commitment, and intent to quit) were grouped and their sums correlated in SPSS. The group correlation matrix is shown below in Table 5. In regard to coding, intrinsic job satisfaction is designated as “GIJS;” extrinsic job satisfaction is “GEJS;” affective commitment is “GAC;” and the intent to quit is “GIQ.”

Table 5

Grouped Correlation Matrix for All Variables

Variable	GIJS	GEJS	GAC	GIQ
GIJS				
Pearson Correlation	1.000	.797**	.561**	-.150**
Sig. (2-tailed)		.000	.000	.003
GEJS				
Pearson Correlation	.797**	1.000	.543**	-.181**
Sig. (2-tailed)	.000		.000	.000
GAC				
Pearson Correlation	.561**	.543**	1.000	-.260**
Sig. (2-tailed)	.000	.000		.000
GIQ				
Pearson Correlation	-.150**	-.181**	-.260**	1.000
Sig. (2-tailed)	.003	.000	.000	

N = 380; **Correlation is significant at the 0.01 level (2-tailed).

Table 5 is consistent with the indications in Table 4. Only the intent to quit had negative correlations in the group matrix. Further, affective commitment has the strongest negative correlation with the intent to quit ($r = -.260$). In addition, the extrinsic job satisfaction factors have stronger negative correlations ($r = -.181$) than the intrinsic

job satisfaction factors ($r = -.150$) which is consistent with Herzberg's Two-Factor Theory (Herzberg et al., 1959; Herzberg, 1966) in terms of the extrinsic factors indicating a source of dissatisfaction within the variable insofar as it relates to the intent to quit.

Independent-Samples t-Tests

Independent-samples t-tests were conducted to compare the relationships of the grouped variables between the publically listed, privately held, and unionized operations. T-tests were also conducted to compare the relationships of the grouped variables between the commercial, industrial, and residential positions. The comparisons are shown in Tables 6 and 7, respectively, below.

Table 6

Comparison of Grouped Variables between Publically Listed, Privately Held, and Unionized Operations

Group	Operation	N	Mean	Std. Dev.	Sig. (2-tailed)		
					Public/Private	Public/Union	Private/Union
GIJS	Public	104	37.56	7.962	.388	.876	.257
	Private	147	36.71	7.454			
	Union	129	37.71	7.199			
GEJS	Public	104	26.46	6.328	.136	.956	.109
	Private	147	25.35	5.418			
	Union	129	26.42	5.658			
GAC	Public	104	28.22	7.648	.206	.228	.981
	Private	147	27.01	7.289			
	Union	129	26.99	7.772			
GIQ	Public	104	8.46	1.955	.032	.878	.020
	Private	147	7.90	2.059			
	Union	129	8.50	2.191			

Table 6 reflects that there is no significant difference between the three operations with respect to the grouped intrinsic and extrinsic job satisfaction factors, nor the

affective commitment group, as $p > .05$ in each column. The same is true for the intent to quit group, but only for the comparison of publicly listed and unionized operations.

To determine the effect of the difference between the publically listed and privately held operations as well as the privately held and union operations, the effect size statistic was calculated for these two comparisons related to the intent to quit. The magnitude of the difference in the means was found to be small (Cohen, 1988). More specifically, eta squared for the publically listed and privately held comparison is .018. The eta squared for the privately held and union operations is .019. Thus, the level of significance explains less than two percent of the variance between each of the respective groups.

Table 7

Comparison of Grouped Variables between Commercial, Industrial, and Residential Positions

Group	Position	N	Mean	Std. Dev.	Sig. (2-tailed)		
					Comm./Ind.	Ind./Res.	Comm./ Res.
GIJS	Commercial	132	37.73	7.110	.053	.085	.819
	Industrial	64	35.61	7.285			
	Residential	184	37.54	7.814			
GEJS	Commercial	132	25.28	5.284	.061	.014	.358
	Industrial	64	24.45	5.339			
	Residential	184	26.59	6.160			
GAC	Commercial	132	26.98	7.480	.305	.031	.167
	Industrial	64	25.77	8.228			
	Residential	184	28.14	7.293			
GIQ	Commercial	132	8.17	2.017	.755	.859	.554
	Industrial	64	8.27	1.711			
	Residential	184	8.32	2.264			

The only significant differences between the positions shown in Table 7 are the relationship between the industrial and residential positions regarding extrinsic job

satisfaction ($p = .014$) and affective commitment ($p = .031$). To determine the effect of the difference, the effect size statistic was calculated for this comparison related to the extrinsic job satisfaction and affective commitment group variables. The magnitude of the difference in the means was found to be small (Cohen, 1988). More specifically, eta squared for grouped extrinsic job satisfaction is .018. The eta squared for grouped affective commitment is .024. Thus, the level of significance explains less than two and one-half percent of the variance between each of the respective groups.

Hypotheses Analysis

It was hypothesized that drivers with higher measures of extrinsic and intrinsic job satisfaction factors and affective commitment are less likely to intend to leave an organization.

H1a: Extrinsic job satisfaction for drivers is negatively related to their intention to leave the organization.

H1o: Extrinsic job satisfaction for drivers is not related to their intention to leave the organization.

H2a: Intrinsic job satisfaction for drivers is negatively related to their intention to leave the organization.

H2o: Intrinsic job satisfaction for drivers is not related to their intention to leave the organization.

H3a: Affective commitment for drivers is negatively related to their intention to leave the organization.

H3o: Affective commitment for drivers is not related to their intention to leave the organization.

Grouped extrinsic job satisfaction factors shown in Table 5 reflect a small negative correlation ($r = -.181$, $p < .01$) with the intent to quit. Inasmuch as the level of

significance (.000) is less than the alpha (0.05) the Null Hypothesis is rejected. Thus, as extrinsic job satisfaction factors improve, the intent to quit among drivers in the solid waste management industry decreases. Accordingly, Hypothesis H1a is supported.

Grouped intrinsic job satisfaction factors shown in Table 5 reflect a small negative correlation ($r = -.150$, $p < .01$) with the intent to quit. Inasmuch as the level of significance (.003) is less than the alpha (0.05) the Null Hypothesis is rejected. Thus, as intrinsic job satisfaction factors improve, the intent to quit among drivers in the solid waste management industry decreases. Accordingly, Hypothesis H2a is supported.

Grouped affective commitment factors shown in Table 5 reflect a small negative correlation ($r = -.260$, $p < .01$) with the intent to quit. Inasmuch as the level of significance (.000) is less than the alpha (0.05) the Null Hypothesis is rejected. Thus, as affective commitment improves, the intent to quit among drivers in the solid waste management industry decreases. Accordingly, Hypothesis H3a is supported.

Summary

The results of this research demonstrate that intrinsic and extrinsic job satisfaction factors and affective commitment do have an influence on the intent to quit among drivers in the solid waste management industry. This finding is consistent with Udechukwu (2007) who reached the same result regarding the influence of intrinsic and extrinsic job satisfaction factors on turnover among corrections officers. Studies involving health care workers and truck drivers also reached the same conclusion about job satisfaction (Randolph & Johnson, 2005; Stephenson & Fox, 1996; Tang et al, 2000). Similarly, the results concerning the influence of affective commitment are consistent

with those of Elangovan (2001) and Price (1991) who both found a relationship with the intent quit.

All three of the hypotheses were supported. Further, the result is the same whether the operation is publicly listed, privately held, or unionized. Nor does it matter whether the employee's job classification is commercial, industrial, or residential driver.

With respect to the highly significant relationship between intrinsic and extrinsic job satisfaction factors in the intent to quit, the results show that extrinsic factors ($r = -.181, p < .01$) have a greater influence than intrinsic factors ($r = -.151, p < .01$).

However, the variable with the strongest influence on the intent to quit is affective commitment ($r = -.260, p < .01$). The implications of these findings will be discussed in the next chapter.

CHAPTER V

Summary and Conclusion

The purpose of this research was to determine the antecedents to the intention to quit in an occupation characterized by a high degree of voluntary attrition. More specifically, the study was aimed at the influence of intrinsic and extrinsic job satisfaction factors and affective commitment on the intent to quit among certain drivers in the solid waste management industry. The data collection involved questionnaires administered to a research sample taken from a publicly listed company, a privately held organization, and a unionized operation which all had drivers working in commercial, industrial, and residential positions.

This chapter discusses the research findings, the limitations, and practical implications. It also includes recommendations for future research regarding Herzberg's (Herzberg et al., 1959; Herzberg, 1966) Two-Factor Theory and the solid waste management employees, generally. The importance of affective commitment and its relationship to the intent to quit is explained, too.

Support for Hypotheses

It was hypothesized that drivers with higher measures of intrinsic and extrinsic job satisfaction factors and affective commitment are less likely to intend to leave an organization. The three hypotheses are listed below.

H1a: Extrinsic job satisfaction for drivers is negatively related to their intention to leave the organization.

H1o: Extrinsic job satisfaction for drivers is not related to their intention to leave the organization.

H2a: Intrinsic job satisfaction for drivers is negatively related to their intention to leave the organization.

H2o: Intrinsic job satisfaction for drivers is not related to their intention to leave the organization.

H3a: Affective commitment for drivers is negatively related to their intention to leave the organization.

H3o: Affective commitment for drivers is not related to their intention to leave the organization.

In each case, the alternative hypothesis was supported and the null rejected.

Accordingly, drivers in the solid waste management industry with higher measures of intrinsic and extrinsic job satisfaction factors and affective commitment are less likely to consider leaving their respective employers.

The Influence of Intrinsic and Extrinsic Job Satisfaction Factors

The results of this study are consistent with Herzberg's (Herzberg et al., 1959; Herzberg, 1966) theory that intrinsic factors have a greater influence on job satisfaction than extrinsic factors. This outcome is in line with similar studies that reached the same conclusion (Bassett-Jones & Lloyd, 2005; DeShields et al., 2005; Grollman, 1974; Knight & Westbrook, 1999; Locke & Whiting, 1974; O'Reilly & Caldwell, 1980; Udechukwu, 2007). Significantly, these studies involved both white and blue collar classifications. Thus, the theory extends its durability.

However, the close relationship found in this study between intrinsic and extrinsic job satisfaction factors leaves open the question of whether the position and/or occupational setting could be determinative (Locke & Whiting, 1974; Ratavoot & Ogunlana, 2003). In this regard, Young et al. (1998) found intrinsic and extrinsic job

satisfaction factors to be equally predictive. It is noted that the outcome of the research is not a siren call to discount that possibility.

Some individual intrinsic and extrinsic job satisfaction factors are worthy of note. In the intrinsic category shown in Table 4, this study found that authority, recognition, and co-workers have no significant relationship with the intent to quit. On the extrinsic side which represents sources of potential job dissatisfaction, social status, supervision (relationship and technical), and policies only influence the intent to leave. This is also true for ability utilization and variety, which are both intrinsic factors.

Table 4 reveals that intrinsic factors like activity, independence, moral values, responsibility, and achievement play a significant role in promoting a desire to stay, as well as the intent to leave. Along this same line, extrinsic factors such as job security, pay, and working conditions influence both the desire to stay and the intent to leave.

The analysis points out those specific areas may warrant special attention in the design of human capital strategies to enhance operational performance via talent attraction, optimization, and retention. It also calls attention to opportunities for efficient resource allocation.

Job Satisfaction and Affective Commitment

The research did not seek to resolve the complex relationship between the constructs of job satisfaction and affective commitment. The intention of the study was to determine which one of the two had the greater influence on the intent to quit in the solid waste management industry. To be sure, there are other factors such as job stress, the quality of the leader-member exchange, dispositional traits, social support, and collective representation that could also play significant roles in deciding whether to quit

a job (Abraham et al., 2005; Chiu & Francesco, 2003; Firth et al., 2004; Morrow et al., 2005; Price, 2001).

Regarding job satisfaction, the study revealed that intrinsic factors have a greater positive influence on affective commitment, but extrinsic factors take the lead in their influence on the intent to quit. This supports Herzberg's (Herzberg et al., 1959; Herzberg, 1966) theory that intrinsic factors are motivational in nature and extrinsic factors are potential sources of dissatisfaction.

On the other hand, affective commitment leads either intrinsic or extrinsic job satisfaction factors in terms of its influence on encouraging or discouraging turnover intentions. Chief among the sub-variables within the affective commitment category is a desire to stay in the first place. As shown on Table 4, this has the strongest positive influence on the desire to stay in addition to the greatest negative correlation with the intent to quit. Given a strong desire to be a part of an organization, it follows that other aspects of affective commitment would parallel those results. Interestingly, this outcome was the same regardless of the type of employer or job classification.

Predicting Turnover

The intent to quit is the behavioral precursor to turnover (Elangovan, 2001). As stated above, job satisfaction and affective commitment are just two of the influential factors (Price, 2001). Between these two constructs, affective commitment has been found to be the better predictor of turnover (Griffeth et al., 2000). Within job satisfaction, intrinsic factors best the extrinsic factors as being more predictive of a desire to stay (Randolph & Johnson, 2005). To a lesser extent, available employment alternatives, work environment, leadership, and procedural justice come into play.

Demographics, such as gender, are even less significant. Not much has changed about the intent to quit over the past half century (Mitchell et al., 2001). Since turnover is not always accompanied by rational decision making, a means for accurate forecasting remains elusive (Hong & Chao, 2007).

The results of this study support the conclusion that affective commitment carries more weight than job satisfaction in the determination of whether to stay or leave an organization in the solid waste management industry. In this sense, the drivers in the solid waste management industry are indistinguishable from employees in many other industrial settings (Griffeth et al., 2000).

Practical Implications

The implications for developing a more positive personal work experience and opinion of one's employer with the intent to increase the likelihood of talent retention are far reaching (Porter, Crampton, & Smith, 1976). Ignoring these opportunities sacrifices potential gains in competitive advantage and compromises the firm's reputation (Shaw et al., 2009).

Voluntary attrition is costly on many levels, particularly when it involves the loss of a valued contributor (Griffeth & Hom, 2001). The results of this study indicate that the retention strategy begins with a sound hiring process. The candidate should have an initial desire to be a part of the organization's mission. Dissonance at the hiring stage introduces an uncommitted participant to the workplace that is less likely to contribute maximum performance.

The impact of voluntary attrition includes the loss of intellectual capital and organizational knowledge (Cascio, 2000). Insofar as drivers in the solid waste

management industry are concerned, route knowledge, safety issues, attention to customer idiosyncrasies, inter-company relationships, and communications are interrupted. Any investment in that person's development is lost and morale suffers (Mitchell, Mackenzie, Styve, & Gover, 2000). In the worst case, a competitor is the beneficiary.

Employers should not be lured into thinking that a weak economy or high unemployment rates carry promises of ready replacements (Morrow et al., 2005). There is no guarantee that the new hire will perform as well, or better. For that matter, the best ones may not even want the job.

Extrinsic job satisfaction factors establish a set of fundamental expectations that outline the basic employment relationship (Herzberg, 1966). For example, people expect that company policies will be fair and reasonable. They expect procedural justice and safe working conditions. Competitive pay practices and no disparate administration of the same are also anticipated. Great leadership practices may not be required, but abrasive and incompetent supervision will not be tolerated. Against this background, opportunities for perceptions of job security may be enhanced (Cooper, 2006). Of course, fulfillment of these expectations only serves to reduce the likelihood of job dissatisfaction and the intent to quit.

Job satisfaction is enriched by intrinsic factors that motivate better performance (Herzberg, 1966). The very nature of the work performed by drivers in the solid waste management industry involves often working alone without close supervision. This research demonstrates that they do not seek special authority or high recognition. However, they do want the chance to responsibly exercise their talents in meaningful

assignments. Being furnished with capable tools and equipment suited for the task is critical to that end along with relevant training. This provides a sense of accomplishment, particularly when they have constructive input into matters that affect them (Dole & Schroeder, 2001). In addition, they want legal and ethical compliance.

With regard to affective commitment, pride in your employer goes a long way (Katzenbach, 2003). People want to feel like they are a part of a winning team, and winners in their own right. In the solid waste management industry, this could mean knowing that the company is ethical and acts in an environmentally responsible fashion. Delighting the customer with timely and thorough services also contributes to the feeling. In addition, positive attitudes can be linked to knowing that one is a vital part of maintaining the sanitary conditions in their own community. Genuine appreciation for contributions along with respectful two-way communications cannot be understated, either (Katzenbach, 2003).

The implications of these research findings are not inconsistent with profitable and efficient business practices (Borstadt & Zwirlein, 1995; Roelen, Koopmans, & Groothoff, 2008). Indeed, they are right in line with best practices. There are very few reasons to employ a reluctant hire. It is difficult to imagine an enlightened employer striving to create a draconian work environment replete with nonsensical policies and disparate treatment. Reward systems that in effect punish rather than motivate performance serve no good purpose (Kohn, 1999). Nor does it seem beneficial to restrain people who want to contribute their best effort and feel good about it. In sum, it costs more to do it wrong, than it does to do it right.

The implications of this research go well beyond the contribution to resolving conflicts in prior research. It will serve to sharpen the focus of hiring strategies that are more likely to align values and result in a better employer-employee match. Retention strategies can be re-evaluated and tailored for congruence with the needs of the workforce as well as business objectives. Any improvements in these critical areas could have a positive influence on organizational performance and profitability.

Limitations

The scope of this study was limited by certain considerations. First, the research sample was limited to a single industry. Further, it involved employees from only three separate operations within the United States. This could limit the study's generalizability.

Secondly, the results could also differ in various geographic locations which may be culturally distinct. The working conditions of the location as well as local policies and practices of a particular employer could present alternative perspectives that were not taken into account in the study.

Thirdly, the study was limited to truck drivers from the commercial, industrial, and residential lines of business. This would exclude recycle, transfer, and container delivery drivers. It does not address maintenance personnel or other operational support classifications. Landfill operations were omitted, too, along with managerial, sales, and administrative classifications. The rationale for excluding certain jobs was to focus on the principle classifications which have the greatest effect on operational performance and most impactful by turnover.

The scope of the study did not focus on an analysis of demographic data. Thus, it did not determine whether there is an effect of demographic criteria on the intent to quit.

The impact of the economy on the intent to quit was not addressed. The data was collected in the first month of 2010 following a year when the nation's economy suffered one of its worst economic downturns. Accordingly, a different economic scenario which offers a wider range of employment alternatives may reveal other outcomes.

Finally, there are a number of other factors besides job satisfaction and affective commitment that may influence the intent to quit. Among those are job stress, the quality of the leader-member exchange, dispositional traits, social support, and collective representation that could also play significant roles in deciding whether to quit a job (Abraham et al., 2005; Chiu & Francesco, 2003; Firth et al., 2004; Morrow et al., 2005; Price, 2001). These other factors were not a part of the measurement in the study.

Recommendations for Future Research

This study calls attention to an understudied category of employee that provides vital environmental services to every corner of the nation on a daily basis. Moreover, they do so while wielding massive and unforgiving equipment on public and private thoroughfares at all hours of the day. Thus, the solid waste management industry deserves inclusion in future research that contributes to the body of knowledge concerning good business practices.

Although this research considered the role of supervision in job satisfaction, the quality of the leader-member exchange should be explored more deeply to determine the impact of field leadership on affective commitment. This information may provide valuable insight into specific training needs for leadership development.

The effect of other factors which influence the intent to quit should also be studied. In this regard, the stress associated with performing onerous tasks for long hours may enlighten the industry on safety and risk management issues. Better understanding of the relationship between stress and attendance is also important to stem absenteeism in the industry. Of course, the influence of stress on the intent to quit also warrants attention.

It would also be interesting to re-visit Edwin Locke's (Locke & Whiting, 1974) study of solid waste management employees to determine the effect of Goal Theory in a more contemporary setting. Its effect on job satisfaction, affective commitment, and the intent to quit could be illuminating.

Finally, whether any of the aforementioned factors or constructs has a causal effect, or causal ordering, in relation to the intent to quit has not been resolved. This knowledge would provide practitioners with the specificity necessary to possibly re-deploy resources toward their most advantages utilization.

APPENDIX

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Letter to Participants

Kenneth M. Baylor

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January, 2010

Dear Participant:

I am a doctoral student at Nova Southeastern University's Huizenga School. As a part of my studies, I am conducting an academic research project concerning job satisfaction, affective commitment, and turnover among drivers in the solid waste management industry. Participants in this study are all randomly selected for the invitation to participate.

This is to invite you to *voluntarily* participate in this study by *anonymously* completing the attached questionnaires. The process is expected to take about 30 minutes, or less. I will be available in or near the room throughout the session to answer any questions from participants and then collect their completed forms in a *confidential* envelope. Please be as open and honest as possible. *No one from the company will see your responses or the completed questionnaires.* Of course, you have the option to terminate your voluntary participation at any time.

The satisfaction that comes from participating in an academic research project like this is the only benefit to you. There is no other compensation.

Thank you for your kind consideration and participation in this project. I deeply appreciate your contribution.

Sincerely,

Kenneth M. Baylor
Doctoral Candidate
Nova Southeastern University
Ft. Lauderdale, Florida

Draft Instruments**General Information**

You have been randomly selected to participate in a research project. Your participation in this survey process is voluntary and strictly confidential. Please complete this questionnaire as openly and honestly as possible. Any questions you may have about the process will be promptly answered by the researcher. You may quit at any time.

DO NOT SIGN YOUR NAME.

1. **Gender** (circle one): Male Female
2. **Your age:** _____
3. **How long have you been working for the company?** _____ (years)
4. **How long have you been a driver?** _____ (years)
5. **Position** (check one): Commercial ____ Industrial ____ Residential ____
6. **Your highest level of education** (circle one):
 - a. Less than high school
 - b. Some high school
 - c. Completed high school
 - d. Some college
 - e. Completed college

SURVEY

(MSQ: Weiss, Dawis, England, & Loquist, 1967)

You have been randomly selected to participate in a research project. Your participation in this survey process is voluntary and strictly confidential. Please complete this questionnaire as openly and honestly as possible. Any questions you may have about the process will be promptly answered by the researcher. You may quit at any time.

DO NOT SIGN YOUR NAME.

Instructions: Ask yourself: How satisfied am I with this aspect of my job?

5 = extremely satisfied

4 = very satisfied

3 = satisfied

2 = somewhat satisfied

1 = not satisfied

1. Being able to keep busy all the time..... 1 2 3 4 5
2. The chance to work alone on the job..... 1 2 3 4 5
3. The chance to do different things from time to time. 1 2 3 4 5
4. The chance to be somebody in the community.....1 2 3 4 5
5. The way my boss handles his/her workers. 1 2 3 4 5
6. The competence of my supervisor in making decisions.1 2 3 4 5
7. Being able to do things that do not go against my conscience..... 1 2 3 4 5
8. The way my job provides steady employment.....1 2 3 4 5
9. The chance to do things for other people.....1 2 3 4 5
10. The chance to tell people what to do.....1 2 3 4 5
11. The chance to do something special that makes use of my abilities... 1 2 3 4 5
12. The way company policies are put into practice.....1 2 3 4 5
13. My pay and the amount of work I do.....1 2 3 4 5
14. The chances for advancement on this job.....1 2 3 4 5
15. The freedom to use my own judgment.....1 2 3 4 5
16. The chance to try my own methods of doing the job.....1 2 3 4 5
17. The working conditions.....1 2 3 4 5
18. The way my co-workers get along with each other.....1 2 3 4 5
19. The praise I get for doing a good job.....1 2 3 4 5
20. The feeling of accomplishment I get from the job.....1 2 3 4 5

Survey

(AC: Meyer, Allen, & Smith, 1993)

You have been randomly selected to participate in a research project. Your participation in this survey process is voluntary and strictly confidential. Please complete this questionnaire as openly and honestly as possible. Any questions you may have about the process will be promptly answered by the researcher. You may quit at any time.

DO NOT SIGN YOUR NAME.

Please indicate your *Agreement or Disagreement* with the following statements about your feeling toward your organization.

7 = Strongly Agree
6 = Agree
5 = Somewhat Agree
4 = Neither Agree or Disagree
3 = Somewhat Disagree
2 = Disagree
1 = Strongly Disagree

1. I would be very happy to spend the rest
of my career with this organization.....1 2 3 4 5 6 7
2. I really feel as if this organization's
problems are my own.....1 2 3 4 5 6 7
3. I feel a strong sense of belonging to my
organization.....1 2 3 4 5 6 7
4. I feel emotionally attached to this
organization.....1 2 3 4 5 6 7
5. This organization has a great deal of
personal meaning to me.....1 2 3 4 5 6 7
6. I feel like a "part of the family" at my
organization.....1 2 3 4 5 6 7

Survey

(IQ: Colarelli, 1984)

You have been randomly selected to participate in a research project. Your participation in this survey process is voluntary and strictly confidential. Please complete this questionnaire as openly and honestly as possible. Any questions you may have about the process will be promptly answered by the researcher. You may quit at any time.

DO NOT SIGN YOUR NAME.

Please rate the extent to which you *Agree* or *Disagree* with the following statements:

5 = Strongly Agree
4 = Agree
3 = Neither Agree or Disagree
2 = Disagree
1 = Strongly Disagree

1. If I have my own way, I will be working for
my current employer one year from now.....1 2 3 4 5
2. I frequently think of quitting my job.....1 2 3 4 5
3. I am planning to search for a new job in
the next 12 months.....1 2 3 4 5

Thank you!